

10/602,392

## WEST Search History

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DATE: Wednesday, May 26, 2004

Hide?	<u>Set</u> <u>Name</u>	<u>Query</u>	<u>Hit</u> <u>Count</u>
		<i>DB=EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L7	(Acrylamidopropylenesulfonic acid near vinylformamide) or (acryldimethyltauramide near2 vinylformamide) or ((acryloyldimethyltaurate or (acryloyl adj dimethyl adj taurate) or (acryloyldimethyl adj taurate) or (acryloyl adj dimethyltaurate)) adj vinylpyrrolidone) or aristoflex\$4 avc\$3	6
		<i>DB=PGPB; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L6	(Acrylamidopropylenesulfonic acid near vinylformamide) or (acryldimethyltauramide near2 vinylformamide) or ((acryloyldimethyltaurate or (acryloyl adj dimethyl adj taurate) or (acryloyldimethyl adj taurate) or (acryloyl adj dimethyltaurate)) adj vinylpyrrolidone) or aristoflex\$4 avc\$3	17
		<i>DB=USPT; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L5	L4 not l1	0
<input type="checkbox"/>	L4	Acrylamidopropylenesulfonic acid near vinylformamide	1
<input type="checkbox"/>	L3	L2 not l1	0
<input type="checkbox"/>	L2	acryldimethyltauramide near2 vinylformamide	1
<input type="checkbox"/>	L1	((acryloyldimethyltaurate or (acryloyl adj dimethyl adj taurate) or (acryloyldimethyl adj taurate) or (acryloyl adj dimethyltaurate)) adj vinylpyrrolidone) or aristoflex\$4 avc	5

END OF SEARCH HISTORY

10/602,392

\*\*\*\*\* Welcome to STN International \*\*\*\*\*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
 NEWS 2 "Ask CAS" for self-help around the clock  
 NEWS 3 JAN 27 Source of Registration (SR) information in REGISTRY updated  
 and searchable  
 NEWS 4 JAN 27 A new search aid, the Company Name Thesaurus, available in  
 CA/Caplus  
 NEWS 5 FEB 05 German (DE) application and patent publication number format  
 changes  
 NEWS 6 MAR 03 MEDLINE and LMedLINE reloaded  
 NEWS 7 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
 NEWS 8 MAR 03 FRANCEPAT now available on STN  
 NEWS 9 MAR 29 Pharmaceutical Substances (PS) now available on STN  
 NEWS 10 MAR 29 WPIFV now available on STN  
 NEWS 11 MAR 29 New monthly current-awareness alert (SDI) frequency in RAPRA  
 NEWS 12 APR 26 PROMT: New display field available  
 NEWS 13 APR 26 IFIPAT/IFIUDB/IFICDB: New super search and display field  
 available  
 NEWS 14 APR 26 LITAlert now available on STN  
 NEWS 15 APR 27 NLDB: New search and display fields available  
 NEWS 16 May 10 PROUSDDR now available on STN  
 NEWS 17 May 19 PROUSDDR: One FREE connect hour, per account, in both May  
 and June 2004  
 NEWS 18 May 12 EXTEND option available in structure searching  
 NEWS 19 May 12 Polymer links for the POLYLINK command completed in REGISTRY  
 NEWS 20 May 17 FRFULL now available on STN

NEWS EXPRESS MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT  
 MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
 AND CURRENT DISCOVER FILE IS DATED 26 APRIL 2004

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 NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
 NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that  
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FILE 'HOME' ENTERED AT 16:02:03 ON 26 MAY 2004

=> file caplus, kosmet, uspatful, scisearch, ipa

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.63	0.63

FILE 'CAPLUS' ENTERED AT 16:04:05 ON 26 MAY 2004

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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'KOSMET' ENTERED AT 16:04:05 ON 26 MAY 2004  
COPYRIGHT (C) 2004 International Federation of the Societies of Cosmetics Chemists

FILE 'USPATFULL' ENTERED AT 16:04:05 ON 26 MAY 2004  
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'SCISEARCH' ENTERED AT 16:04:05 ON 26 MAY 2004  
COPYRIGHT 2004 THOMSON ISI

FILE 'IPA' ENTERED AT 16:04:05 ON 26 MAY 2004  
COPYRIGHT (C) 2004 American Society of Hospital Pharmacists (ASHP)

=> s 58374-69-9/rn or 13162-05-5/rn or 88-12-0/rn  
'RN' IS NOT A VALID FIELD CODE  
'RN' IS NOT A VALID FIELD CODE  
'RN' IS NOT A VALID FIELD CODE  
L1 3841 58374-69-9/RN OR 13162-05-5/RN OR 88-12-0/RN

=> d l1 kwic

L1 ANSWER 1 OF 3841 CAPLUS COPYRIGHT 2004 ACS on STN  
IT 56-81-5, Glycerin 74-85-10, Ethylene, polymers with methacrylates,  
partially hydrolyzed 75-01-4D, Vinyl chloride, graft polymers  
79-10-7D, Acrylic acid, esters, polymers 79-10-7D, Acrylic acid,  
polymers, esters, partially hydrolyzed 79-41-4D, Methacrylic acid,  
esters, polymers with ethylene, partially hydrolyzed 88-12-0  
100-42-5D, Styrene, graft polymers 115-77-5, Pentaerythritol 872-50-4  
1305-78-8, Calcium oxide 1309-64-4, Antimony oxide (Sb2O3) 1314-13-2,  
Zinc oxide (ZnO) 1317-38-0, Cupric oxide 1344-28-1, Alumina  
1344-43-0, Manganous oxide 7429-90-5, Aluminum 7440-02-0, Nickel  
7440-21-3, Silicon 7440-22-4, Silver 7440-44-0, Carbon 7440-50-8,  
Copper 7440-57-5, Gold 7631-86-9, Silica 7704-34-9D, Sulfur, compds.  
7727-37-9D, Nitrogen, compds. 9002-86-2, Ethene, chloro-, homopolymer  
9002-88-4, Polyethylene 9002-88-4D, Polyethylene, uretheres 9003-07-0  
9003-17-2, Polybutadiene 9003-20-7D, Poly vinylacetate, partially  
saponif. 9003-29-6, Polybutene 9003-31-0, Polyisoprene 9003-39-8  
9003-53-6 9003-25-8, Starch 9006-26-2, Polyethylenemaleic anhydride  
9010-77-9, Polyethyleneacrylic acid 9011-13-6, Polystyrene maleic  
anhydride 10028-15-6, Ozone 12047-27-7, Barium titanate (BaTiO3)  
12060-59-2, Strontium titanate (SrTiO3) 12070-12-1, Tungsten carbide  
(WC) 13463-67-7, Titanium oxide (TiO2) 24937-78-8 24937-78-8D,  
Ethylene-vinyl acetate polymer, partially hydrolyzed 25014-41-9,  
polyacrylonitrile 25067-34-9 25322-68-3 25322-69-4 25722-45-6  
60676-86-0, Fused silica 65014-83-7, Ethylenemethacrylate copolymer  
RL: DEV (Device component use); USES (Uses)  
(devices and methods for holding a biopolymeric array)

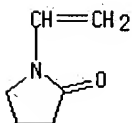
=> fil reg; d acc 88-12-0; fil CAPLUS,KOSMET,USPATFULL,SCISEARCH,IPA

FILE 'REGISTRY' ENTERED AT 16:05:25 ON 26 MAY 2004

ANSWER 1 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 88-12-0 REGISTRY  
CN 2-Pyrrolidinone, 1-ethenyl- (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 2-Pyrrolidinone, 1-vinyl- (7CI, 8CI)  
OTHER NAMES:

# STN Columbus

CN 1-Ethenyl-2-pyrrolidinone  
 CN 1-Vinyl-2-pyrrolidinone  
 CN 1-Vinyl-2-pyrrolidone  
 CN Aronix M 150  
 CN N-Vinyl-2-pyrrolidinone  
 CN N-Vinyl-2-pyrrolidone  
 CN N-Vinylpyrrolin-2-one  
 CN N-VP  
 CN NSC 10222  
 CN NSC 683040  
 CN V-Pyrol  
 CN V-Pyrol RC  
 CN Vinylbutyrolactam  
 FS 3D CONCORD  
 DR 94800-10-9, 153631-60-8  
 MF C6 H9 N O  
 CI COM  
 LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS,  
 BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS,  
 CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHM, CSNB, DETHERM\*, EMBASE,  
 ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, IFICDB,  
 IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC, PIRA, PROMT,  
 RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2,  
 USPATFULL, VTB  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 DT.CA Caplus document type: Book; Conference; Dissertation; Journal; Patent;  
 Report  
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
 MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC  
 (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);  
 NORL (No role in record)  
 RLD.P Roles for non-specific derivatives from patents: ANST (Analytical  
 study); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation);  
 PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES  
 (Uses)  
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological  
 study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU  
 (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT  
 (Reactant or reagent); USES (Uses); NORL (No role in record)  
 RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical  
 study); BIOL (Biological study); CMBI (Combinatorial study); PREP  
 (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or  
 reagent); USES (Uses)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

3716 REFERENCES IN FILE CA (1907 TO DATE)  
 1049 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 3723 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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FILE 'CAPLUS' ENTERED AT 16:05:26 ON 26 MAY 2004

FILE 'KOSMET' ENTERED AT 16:05:26 ON 26 MAY 2004

FILE 'USPATFULL' ENTERED AT 16:05:26 ON 26 MAY 2004

FILE 'SCISEARCH' ENTERED AT 16:05:26 ON 26 MAY 2004

FILE 'IPA' ENTERED AT 16:05:26 ON 26 MAY 2004

=> s 58374-69-9/rn  
'RN' IS NOT A VALID FIELD CODE  
'RN' IS NOT A VALID FIELD CODE  
'RN' IS NOT A VALID FIELD CODE  
L2 24 58374-69-9/RN

=> d l2

L2 ANSWER 1 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN

## Full Text

AN 2002:504583 CAPLUS  
DN 137:83376  
TI Oxidizing composition for treating keratinous materials based on  
amphiphilic polymers of at least an ethylenically unsaturated monomer with  
sulfonic group and comprising a hydrophobic part  
IN Kravtchenko, Sylvain; Lagrange, Alain  
PA L'oreal, Fr.  
SO PCT Int. Appl., 57 pp.  
CODEN: PIXXD2  
DT Patent  
LA French  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002051369	A1	20020704	WO 2001-FR4077	20011219
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
FR 2818540	A1	20020628	FR 2000-16954	20001222
FR 2818543	A1	20020628	FR 2001-328	20010111
EP 1347736	A1	20031001	EP 2001-994913	20011219
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2004074015	A1	20040422	US 2003-451409	20031201
PRAI FR 2000-16954	A	20001222		
FR 2001-328	A	20010111		
WO 2001-FR4077	W	20011219		

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RE.CNT 3      THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

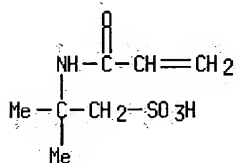
=> d 12 kwic

L2 ANSWER 1 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
IT 96-05-9P 110-26-9P 58374-69-9P  
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(oxidative hair dyes contg. amphiphilic polymers of at least ethylenically unsatd. monomer with sulfonic group)

=> fil reg; d acc 58374-69-9; fil CAPLUS,KOSMET,USPATFULL,SCISEARCH,IPA

FILE 'REGISTRY' ENTERED AT 16:06:25 ON 26 MAY 2004

ANSWER 1 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 58374-69-9 REGISTRY  
CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monoammonium salt (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN Ammonium 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonate  
DR 244202-43-5, 356057-14-2, 363593-04-8, 441768-74-7  
MF C7 H13 N O4 S . H3 N  
CI COM  
LC STN Files: CA, CAPLUS, CHEMLIST, TOXCENTER, USPAT2, USPATFULL  
DT.CA Caplus document type: Patent  
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)  
CRN (15214-89-8)



# NH<sub>3</sub>

25 REFERENCES IN FILE CA (1907 TO DATE)  
16 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
25 REFERENCES IN FILE CAPLUS (1907 TO DATE)

FILE 'CAPLUS' ENTERED AT 16:06:25 ON 26 MAY 2004

FILE 'KOSMET' ENTERED AT 16:06:25 ON 26 MAY 2004

# STN Columbus

FILE 'USPATFULL' ENTERED AT 16:06:25 ON 26 MAY 2004

FILE 'SCISEARCH' ENTERED AT 16:06:25 ON 26 MAY 2004

FILE 'IPA' ENTERED AT 16:06:25 ON 26 MAY 2004

=> s 58374-69-9/rn and 13162-05-5/rn and 88-12-0/rn

'RN' IS NOT A VALID FIELD CODE

'RN' IS NOT A VALID FIELD CODE

'RN' IS NOT A VALID FIELD CODE

L3 0 58374-69-9/RN AND 13162-05-5/RN AND 88-12-0/RN

=> s 13162-05-5/rn

'RN' IS NOT A VALID FIELD CODE

'RN' IS NOT A VALID FIELD CODE

'RN' IS NOT A VALID FIELD CODE

L4 204 13162-05-5/RN

=> d l4 kwic

L4 ANSWER 1 OF 204 CAPLUS COPYRIGHT 2004 ACS on STN

IT 71-52-3D, Bicarbonate, salts 77-77-0, Divinylsulfone 80-62-6, Methyl methacrylate 96-33-3, Methyl acrylate 97-63-2, Ethyl methacrylate 97-88-1, Butyl methacrylate 100-42-5, Styrene, biological studies 104-91-6D, salts 107-13-1, Acrylonitrile, biological studies 140-88-5, Ethyl acrylate 141-32-2, Butyl acrylate 1321-74-0, Divinylbenzene, biological studies 1322-23-2, Trivinylbenzene 2157-01-9, Octyl methacrylate 2495-27-4, Cetyl methacrylate 2499-59-4, Octyl acrylate 3253-41-6, Pentaerythritol tetramethacrylate 3290-92-4, Trimethylolpropane trimethacrylate 3524-66-1, Pentaerythritol trimethacrylate 3524-68-3, Pentaerythritol triacrylate 3812-32-6D, Carbonate, salts 4986-89-4, Pentaerythritol tetraacrylate 7631-99-4, Sodium nitrate, biological studies 7664-38-2D, Phosphoric acid, salts 9002-89-5, Poly(vinyl alcohol) 9003-01-4, Poly(acrylic acid) 9003-39-8, Poly(N-vinylpyrrolidinone) 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9086-85-5, Poly(hydroxypropyl methacrylate) 10043-35-3D, Boric acid, salts 10356-92-0 13162-05-5 13402-02-3, Cetyl acrylate 15625-89-5, Trimethylolpropane triacrylate 19727-16-3, Trimethylolpropane dimethacrylate 25013-15-4, Vinyltoluene 25085-18-1, Poly-(diethylaminoethyl acrylate) 25087-26-7, Poly(methacrylic acid) 25119-82-8 25154-86-3, Poly(dimethylaminoethyl methacrylate) 25249-16-5 26022-14-0, Poly(hydroxyethyl acrylate) 26588-32-9, Vinyl naphthalene 26846-58-2, Pentaerythritol dimethacrylate 27641-41-4D, Peroxydicarbonic acid, derivs. 28106-30-1, Ethylstyrene 28574-59-6, Poly-(dimethylaminoethyl acrylate) 30172-87-3, Trivinylcyclohexane 30206-34-9, Dipentaerythritol tetramethacrylate 30584-69-1, Vinylbenzyl alcohol 37275-47-1, Trimethylolpropane diacrylate 53417-29-1, Pentaerythritol diacrylate 62501-03-5, Poly(hydroxypropyl acrylate) 63971-15-3, Dipentaerythritol tetraacrylate 68224-34-0, Dipentaerythritol triacrylate 77221-84-2, Divinylnaphthalene 92738-89-1, Dipentaerythritol trimethacrylate 114154-64-2, Dipentaerythritol diacrylate 215116-26-0, Dipentaerythritol dimethacrylate 259222-75-8 681214-58-4  
 RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);  
 BIOL (Biological study); USES (Uses)  
 (hemocompatible surface coated polymer system with org. phase and aq. phase and related methods)

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=> fil reg; d acc 13162-05-5; fil CAPLUS,KOSMET,USPATFULL,SCISEARCH,IPA

FILE 'REGISTRY' ENTERED AT 16:08:04 ON 26 MAY 2004

ANSWER 1 REGISTRY COPYRIGHT 2004 ACS on STN

RN 13162-05-5 REGISTRY

CN Formamide, N-ethenyl- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Formamide, N-vinyl- (7CI, 8CI)

OTHER NAMES:

CN Beam Set 770

CN N-Ethenylformamide

CN N-Vinylformamide

CN SR 497

FS 3D CONCORD

DR 339190-63-5

MF C3 H5 N O

CI COM

LC STN Files: BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, IFICDB, IFIPAT, IFIUDB, PIRA, SPECINFO, TOXCENTER, USPAT2, USPATFULL

(\*File contains numerically searchable property data)

Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

DT.CA Caplus document type: Conference; Dissertation; Journal; Patent

RL.P Roles from patents: BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

RL.NP Roles from non-patents: FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

182 REFERENCES IN FILE CA (1907 TO DATE)

50 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

182 REFERENCES IN FILE CAPLUS (1907 TO DATE)

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

FILE 'CAPLUS' ENTERED AT 16:08:05 ON 26 MAY 2004

FILE 'KOSMET' ENTERED AT 16:08:05 ON 26 MAY 2004

FILE 'USPATFULL' ENTERED AT 16:08:05 ON 26 MAY 2004



## STN Columbus

FILE 'SCISEARCH' ENTERED AT 16:08:05 ON 26 MAY 2004

FILE 'IPA' ENTERED AT 16:08:05 ON 26 MAY 2004

=&gt; s aristoflex### avc##

L5 45 ARISTOFLEX### AVC##/

=&gt; dup rem l5

DUPLICATE IS NOT AVAILABLE IN 'KOSMET'.

ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE

PROCESSING COMPLETED FOR L5

L6 44 DUP REM L5 (1 DUPLICATE REMOVED)

=&gt; d l6 ibib kwic

L6 ANSWER 1 OF 44 CAPLUS COPYRIGHT 2004 ACS on STN

Full Text

ACCESSION NUMBER: 2004:392446 CAPLUS

TITLE: O/W emulsions with a combination of a silicone-based emulsifier and one or several surfactants, selected from anionic and cationic surfactants, their production and use as skin cleansers

INVENTOR(S): Paspaleeva-Kuehn, Valentina; Beutler, Rolf; Heberer, Martina

PATENT ASSIGNEE(S): Merz Pharma GmbH Co. Kgaa, Germany

SOURCE: PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004039338	A1	20040513	WO 2003-EP11528	20031017

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10250755 A1 20040519 DE 2002-10250755 20021031

PRIORITY APPLN. INFO.: DE 2002-10250755 A 20021031

IT INDEXING IN PROGRESS

IT 107-97-1D, Sarcosinic acid, derivs. 139-33-3, Trilon BD 9005-00-9, Brij 721 9006-65-9, Dimethicone 25136-75-8, Merquat plus 3330 52624-59-6, Oxyplex 2004 76724-33-9, Medialan LD 178463-23-5, Fucogel 1000 335383-60-3, Aristoflex AVC 494837-94-4, Abil Care 85 547764-72-7, Hostaphat KW 340D

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(O/W emulsions with a combination of a silicone-based emulsifier and one or several surfactants, selected from anionic and cationic surfactants, their prodn. and use as skin cleansers)

## STN Columbus

=> s 16 and emulsion  
L7 26 L6 AND {EMULSION}

=> d 17 ibib kwic 1-26

L7 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

Full Text

ACCESSION NUMBER: 2004:392446 CAPLUS  
TITLE: O/W emulsions with a combination of a silicone-based emulsifier and one or several surfactants, selected from anionic and cationic surfactants, their production and use as skin cleansers  
INVENTOR(S): Paspaleeva-Kuehn, Valentina; Beutler, Rolf; Heberer, Martina  
PATENT ASSIGNEE(S): Merz Pharma GmbH Co. Kgaa, Germany  
SOURCE: PCT Int. Appl., 37 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004039338	A1	20040513	WO 2003-EP11528	20031017
<p>W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU</p> <p>RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG</p>				
DE 10250755	A1	20040519	DE 2002-10250755	20021031
PRIORITY APPLN. INFO.: DE 2002-10250755 A 20021031				
<p>AB The invention relates to a compn., in particular that may be foamed, with improved skin effect, based on an O/W emulsion with a combination of a silicone-based emulsifier and, in particular, an ionic surfactant. Stable emulsions can be formed with such a compn., which, on application, can be either dispersed or effectively foamed, with or without a propellant gas, which can then be easily applied to the skin and which there generates a particularly fine dispersion of the compn. in the form of an emulsion, for example as a foam and which gives an improved skin sensation. The invention further relates to a simple prodn. method and the use thereof for the care, treatment or mild cleansing of the skin, in particular also in the case of dysfunctional skin. Thus a foam-forming compn. contained (%): water 62.96; Trilon BD 0.05; glycerin 7.00; citric acid 0.04; Abil Care 85 3.00; cetearyl alc. 2.00; isohexadecane 6.00; dicaprylyl ether 4.00; stearyl dimethicone 3.00; shea butter 5.00; Oxyxex 2004 0.05; Medialan LD 2.00; Phenonip 0.90; Fucogel 1000 3.00; Merquat Plus 3330 1.0.</p> <p>ST cosmetic cleansing skin emulsion silicone emulsifier surfactant</p> <p>IT INDEXING IN PROGRESS</p> <p>IT 107-97-1D, Sarcosinic acid, derivs. 139-33-3, Trilon BD 9005-00-9, Brij 721 9006-65-9, Dimethicone 25136-75-8, Merquat plus 3330 52624-59-6, Oxyxex 2004 76724-33-9, Medialan LD 178463-23-5, Fucogel 1000 335383-60-3, Aristoflex AVC 494837-94-4, Abil Care 85 547764-72-7, Hostaphat KW 340D</p> <p>RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)</p>				

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(O/W emulsions with a combination of a silicone-based emulsifier and one or several surfactants, selected from anionic and cationic surfactants, their prodn. and use as skin cleansers)

L7 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

## Full Text

ACCESSION NUMBER: 2002:578377 CAPLUS  
DOCUMENT NUMBER: 138:292363  
TITLE: Stabilizing O/W systems  
AUTHOR(S): Loeffler, Matthias; Miller, Dennis; Henning, Torsten  
CORPORATE SOURCE: Clariant GmbH, Frankfurt, Germany  
SOURCE: Household Personal Products Industry (2002), 39(7), 58-62  
CODEN: HPPIAB; ISSN: 0090-8878  
PUBLISHER: Rodman Publishing Corp.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ST polymer sulfonate stabilizer emulsion cream skin

IT 335383-60-3, Aristoflex AVC

RL: COS (Cosmetic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
(stabilizing O/W systems)

L7 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

## Full Text

ACCESSION NUMBER: 2002:504591 CAPLUS  
DOCUMENT NUMBER: 137:67920  
TITLE: Water-in-oil emulsions containing ammonium acryloyl dimethyltaurate-vinyl pyrrolidone copolymers  
INVENTOR(S): Nielsen, Jens; Kroepke, Rainer; Bleckmann, Andreas  
PATENT ASSIGNEE(S): Beiersdorf A.-G., Germany  
SOURCE: PCT Int. Appl., 41 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002051377	A1	20020704	WO 2001-EP15095	20011220
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
DE 10065045	A1	20020704	DE 2000-10065045	20001223
EP 1365735	A1	20031203	EP 2001-985914	20011220
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
US 2004037797	A1	20040226	US 2003-602392	20030623
PRIORITY APPLN. INFO.: DE 2000-10065045 A 20001223				
WO 2001-EP15095 W 20011220				

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ST water oil emulsion ammonium acryloyl dimethyltaurate vinyl pyrrolidone copolymer

IT 56-81-5, Glycerin, biological studies 57-11-4D, Stearic acid, dipolyhydroxy compd. with PEG 25322-68-3D, PEG, reaction product with stearic acid 26896-18-4D, Isononanoic acid, esters with C16-18-alcs. 335383-60-3, Aristoflex AVC

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

# STN Columbus

(water-in-oil emulsions contg. ammonium acryloyl dimethyltaurate-vinyl pyrrolidone copolymers)

L7 ANSWER 4 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

## Full Text

ACCESSION NUMBER: 2002:486111 CAPLUS  
DOCUMENT NUMBER: 137:52052  
TITLE: O/W emulsions comprising a copolymer of ammonium acryloyl dimethyltaurate and vinylpyrrolidone  
INVENTOR(S): Lanzendoerfer, Ghita; Bormann, Angelika; Nielsen, Jens; Hargens, Birgit; Riedel, Heidi; Von Thaden, Stefanie  
PATENT ASSIGNEE(S): Beiersdorf AG, Germany  
SOURCE: Eur. Pat. Appl., 20 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1216695	A2	20020626	EP 2001-129936	20011217
EP 1216695	A3	20020703		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
DE 10065046	A1	20020704	DE 2000-10065046	20001223
US 2002176832	A1	20021128	US 2001- <u>45065</u>	20011219
JP 2002212025	A2	20020731	JP 2001-387732	20011220
PRIORITY APPLN. INFO.: DE 2000-10065046 A 20001223				

AB The invention concerns cosmetic and dermatol. oil-in-water emulsions that contain up-to 90 wt./wt.% water, up-to 40 wt./wt.% lipids, up-to 10 wt./wt.% emulsifiers and up-to 5 wt./wt.% of at least one ammonium acryloyl dimethyltaurate/vinyl pyrrolidone copolymer. The compns. further contain dyes; they are used for the prepn. of makeups. Thus a compn. contained (wt./wt.%): PEG-30-glycerol stearate 2.50; glycerol monostearate 1.00; cetyl alc. 1.00; vaseline 2.50; polyisobutene 8.00; cyclomethicone 5.00; Aristoflex AVC 0.20; glycerin 5.00; tocopherol acetate 1.00; perfume, preservative, sodium hydroxide, dyes, antioxidants q.s; water to 100.

ST cosmetics **emulsion** ammonium acryloyl dimethyltaurate vinyl pyrrolidone copolymer Aristoflex

IT 335383-60-3 335383-60-3, **Aristoflex AVC**  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(O/W emulsions comprising a copolymer of ammonium acryloyl dimethyltaurate and vinylpyrrolidone)

L7 ANSWER 5 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

## Full Text

ACCESSION NUMBER: 2002:486104 CAPLUS  
DOCUMENT NUMBER: 137:52047  
TITLE: Gel-creams of the O/W **emulsion** type containing ammonium acryloyl dimethyltaurate/vinyl pyrrolidone copolymers ✓  
INVENTOR(S): Lanzendoerfer, Ghita; Nielsen, Jens; Hargens, Birgit; Kroepke, Rainer; Riedel, Heidi; Von Thaden, Stephanie  
PATENT ASSIGNEE(S): Beiersdorf Aktiengesellschaft, Germany  
SOURCE: Eur. Pat. Appl., 17 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1

## STN Columbus

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1216686	A2	20020626	EP 2001-130560	20011221
EP 1216686	A3	20020717		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
DE 10065047	A1	20020704	DE 2000-10065047	20001223
US 2002155076	A1	20021024	US 2001-25062	20011219
US 6620420	B2	20030916		
JP 2002212022	A2	20020731	JP 2001-389388	20011221

PRIORITY APPLN. INFO.: DE 2000-10065047 A 20001223

TI Gel-creams of the O/W **emulsion** type containing ammonium acryloyl dimethyltaurate/vinyl pyrrolidone copolymers

AB The invention concerns cosmetic and dermatol. oil-in-water gel-creams that contain up-to 90 wt./wt.% water, up-to 20 wt./wt.% lipids, up-to 5 wt./wt.% emulsifiers and up-to 5 wt./wt.% of at least one ammonium acryloyl dimethyltaurate/vinyl pyrrolidone copolymer. The compns. further contain dyes; they are used for the prepn. of eye shadows. Thus a hydrodispersion gel contained (wt./wt.%): PEG-8 5.00; ethanol 10.0; **Aristoflex AVC** 0.70; triglyceride, liq. 1.50; glycerin 5.00; panthenol 0.50; tocopherol acetate 0.50; perfume, preservative, sodium hydroxide, dyes, antioxidants q.s; water to 100.

ST hydrogel cosmetics ammonium acryloyl dimethyltaurate vinyl pyrrolidone copolymer **Aristoflex**; eye shadow cosmetics hydrogel **Aristoflex AVC**

IT Cosmetics  
(eye shadows; gel-creams of O/W **emulsion** type contg. ammonium acryloyl dimethyltaurate/vinyl pyrrolidone copolymers)

IT Emulsifying agents  
Hydrogels  
(gel-creams of O/W **emulsion** type contg. ammonium acryloyl dimethyltaurate/vinyl pyrrolidone copolymers)

IT Glycerides, biological studies  
Lipids, biological studies  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(gel-creams of O/W **emulsion** type contg. ammonium acryloyl dimethyltaurate/vinyl pyrrolidone copolymers)

IT Emulsions  
(oil-in-water; gel-creams of O/W **emulsion** type contg. ammonium acryloyl dimethyltaurate/vinyl pyrrolidone copolymers)

IT 335383-60-3 335383-60-3, **Aristoflex AVC**  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(gel-creams of O/W **emulsion** type contg. ammonium acryloyl dimethyltaurate/vinyl pyrrolidone copolymers)

L7 ANSWER 6 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

Full Text

ACCESSION NUMBER: 2002:456166 CAPLUS

DOCUMENT NUMBER: 138:192826

TITLE: A new pH stable polymer for gels and O/W emulsions

AUTHOR(S): Loffler, M.; Miller, D.

CORPORATE SOURCE: Division Functional Chemicals, BU II Personal Care, Clariant GmbH, Frankfurt, D-65926, Germany

SOURCE: SOFW Journal (2002), 128(4), 46-50, 52  
CODEN: SOFJEE; ISSN: 0942-7694

PUBLISHER: Verlag fuer Chemische Industrie H. Ziolkowsky

DOCUMENT TYPE: Journal

LANGUAGE: English

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB **Aristoflex AVC** (Ammonium Acryloyldimethyltaurate/VP Copolymer) is a

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novel synthetic polymer used as gelling agent for aq. systems and thickener for oil-in-water emulsions. This product is insensitive to pH over the pH 4 - 9 range. It shows good stability against degrdn. by high shear and UV light. Ammonium Acryloyldimethyltaurate/VP Copolymer has a good compatibility with polar org. solvents. O/W emulsions may be formulated either by combining it with conventional emulsifiers or by using it as an emulsifier/thickener to give surfactant-free recipes. The product is easy to use as it is pre-neutralized. Cosmetics products contg. Aristoflex AVC show a yield stress, provided the polymer concn. exceeds a certain crit. amt. Rheol. measurements show that the emulsions and gels are viscoelastic, with pronounced elastic properties ( $G' > G''$ ). Aristoflex AVC provides formulations with excellent sensor properties (good skin feel, low degree of stickiness and/or tackiness).

ST Aristoflex AVC cosmetic gel emulsion

IT Cosmetics

(emulsions; pH-stable Aristoflex AVC for gels and O/W emulsions)

IT Cosmetics

(gels; pH-stable Aristoflex AVC for gels and O/W emulsions)

IT Emulsifying agents

Gelation agents

Skin

Thickening agents

Viscoelastic materials

(pH-stable Aristoflex AVC for gels and O/W emulsions)

IT 335383-60-3, Aristoflex AVC

RL: COS (Cosmetic use); PRP (Properties); BIOL (Biological study); USES (Uses)

(pH-stable Aristoflex AVC for gels and O/W emulsions)

L7 ANSWER 7 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

## Full Text

ACCESSION NUMBER: 2002:31961 CAPLUS

DOCUMENT NUMBER: 136:107218

TITLE: Low emulsifier multiple emulsions

INVENTOR(S): Matathia, Michelle; Tadlock, Charles Craig

PATENT ASSIGNEE(S): Color Access, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 5 pp., Cont.-in-part of U.S. Ser. No. 580,743.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002004532	A1	20020110	US 2001-795423	20010228
US 6660252	B2	20031209		
WO 2001091703	A2	20011206	WO 2001-US17234	20010524
WO 2001091703	A3	20020516		
W: AU, CA, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
EP 1289474	A2	20030312	EP 2001-937780	20010524
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
JP 2003534360	T2	20031118	JP 2001-587719	20010524
PRIORITY APPLN. INFO.:			US 2000-580743	A2 20000526

## STN Columbus

US 2001-795423 A 20010228  
 WO 2001-US17234 W 20010524

AB The invention relates to multiple emulsions comprising a primary **emulsion** in an external phase, and comprising a principle water phase and a principle oil phase, the multiple **emulsion** contg. no more than about 1% of an emulsifier having an HLB of about 16 to about 20. Thus, a quadruple **emulsion** contained in the primary **emulsion** (oil-in-water; O/W) cyclomethicone/dimethicone 5.00, phenyltrimethicone 5.00, dimethicone/copolyol 7.00, cyclomethicone 1.00, and dimethicone 8.00% in the phase I. The phase II comprised xanthan gum 0.20, water 64.30, NaCl 1.00, butylene glycol 5.00, and paraben 0.50%. The O/W **emulsion** (20.00%) was mixed with a low emulsifier W/O **emulsion** (78.80%) and Polysorbate-20 0.20, and Carbopol 1.00% by wt.

ST multiple **emulsion** polymer low emulsifier; cosmetic **emulsion** silicone low emulsifier

IT 9004-34-6D, Cellulose, derivs. 9005-25-8D, Starch, derivs. 9006-65-9, Dimethicone 9012-76-4, Chitosan 11138-66-2, Xanthan gum 195868-36-1, Phenyl trimethicone 335383-60-3, Aristoflex AVC  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (low-emulsifier multiple emulsions)

L7 ANSWER 8 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

Full Text

ACCESSION NUMBER: 2001:885688 CAPLUS  
 DOCUMENT NUMBER: 136:10944  
 TITLE: Low emulsifier multiple emulsions for cosmetics  
 INVENTOR(S): Matathia, Michelle; Tadlock, Charles Craig  
 PATENT ASSIGNEE(S): Color Access, Inc., USA  
 SOURCE: PCT Int. Appl., 15 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001091703	A2	20011206	WO 2001-US17234	20010524
WO 2001091703	A3	20020516		
W: AU, CA, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
US 2002004532	A1	20020110	US 2001-795423	20010228
US 6660252 ✓	B2	20031209		
EP 1289474	A2	20030312	EP 2001-937780	20010524
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
JP 2003534360	T2	20031118	JP 2001-587719	20010524
PRIORITY APPLN. INFO.:				
			US 2000-580743	A 20000526
			US 2001-795423	A 20010228
			WO 2001-US17234	W 20010524

AB The invention relates to multiple emulsions comprising a primary **emulsion** in an external phase, and a principle water phase and a principle oil phase, the multiple **emulsion** contg. no more than about 1% an emulsifier having an HLB of 16-20. Thus, a primary **emulsion** for a triple **emulsion** foundation contained in phase 1 cyclomethicone/dimethicone 5.00, Ph trimethicone 5.00, dimethicone/dimethicone copolyol crosslinked copolymer 7.00, cyclomethicone 1.00, dimethicone 8.00, pigment 5.00, and Elefac I-205 3.00% by wt.; in phase 2, the compn. contained xanthan gum 0.20, butylene glycol 5.00, water 59.80, and NaCl 1.00%. The triple **emulsion** was prep'd. from an external water phase composed of water 49.70,

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glycerin/glyceryl polyacrylate 1.00, sodium hyaluronate 10.00, dimethicone copolyol 0.50, Glycereth-26 5.00, 1,3-butylene glycol 5.00, and Tween 0.30%. This water phase was mixed with 1.50% **Aristoflex AVCO** polymer and 30.0% by wt. primary **emulsion**.

ST **emulsion** multiple cosmetic low emulsifier; carbohydrate gum **emulsion** multiple cosmetic  
 IT 79-10-7D, Acrylic acid, polymers 9004-34-6D, Cellulose, derivs. 9005-25-8D, Starch, derivs. 9012-76-4, Chitosan 11138-66-2, Xanthan gum 357210-88-9, **Aristoflex AVCO**  
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
 (low emulsifier multiple emulsions for cosmetics)

L7 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2004 ACS on STN

Full Text

ACCESSION NUMBER: 2001:432814 CAPLUS  
 DOCUMENT NUMBER: 135:24432  
 TITLE: Cosmetic emulsions containing polyesters  
 INVENTOR(S): Loffler, Matthias  
 PATENT ASSIGNEE(S): Clariant G.m.b.H., Germany  
 SOURCE: Eur. Pat. Appl., 8 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1106169	A2	20010613	EP 2000-125866	20001125
EP 1106169	A3	20011017		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 19959119	A1	20010613	DE 1999-19959119	19991208
JP 2001226568	A2	20010821	JP 2000-372726	20001207
US 2001005737	A1	20010628	US 2000-733201	20001208
US 6489395	B2	20021203		

PRIORITY APPLN. INFO.: DE 1999-19959119 A 19991208

AB Emulsions contain polyesters obtained from dicarboxylic acids and polyols and can be used for cosmetic emulsions. Thus, a cream contained polyester 1.00, Cetiol V 7.00, jojoba oil 5.00, iso-Pr myristate 6.00, **Aristoflex AVc** 0.70, glycerin 3.00, water 76.90, preservative qs and perfume 0.40%.  
 ST polyester cosmetic **emulsion** prepn

L7 ANSWER 10 OF 26 KOSMET COPYRIGHT 2004 IFSCC on STN

Full Text

ACCESSION NUMBER: 29636 KOSMET  
 FILE SEGMENT: scientific, technical  
 TITLE: ARSITOFLEX AVC: A NOVEL PH STABLE THICKENER FOR LEAVE ON PRODUCTS  
 AUTHOR: LOEFFLER M (CLARIANT GMBH, DIVISION FUNCTIONAL CHEMICALS, BU II PERSONAL CARE, 65926 FRANKFURT, GERMANY); MILLER D; MCCOLLAM D  
 SOURCE: THE 7 TH JOINT ASCC (AUSTRALIAN SOCIETY OF COSMETIC CHEMISTS) - NZSCC (NEW ZEALAND SOCIETY OF COSMETIC CHEMISTS) AUSTRALASIAN CONFERENCE 2004 "TRILOGY: BEAUTY, MYTH WISDOM AT MIDDLE EARTH", CARLTON HOTEL, AUCKLAND, NEW ZEALAND, MARCH 25 - 28, 2004, HOSTED BY THE NEW ZEALAND SOCIETY OF COSMETIC CHEMISTS, PROCEEDINGS BOOK AND ON CD ROM, PAPER 12, PAGES 1-14  
 Meeting Organizer: NEW ZEALAND SOCIETY OF COSMETIC CHEMISTS (NZSCC), PO BOX 58 519, GREENMOUNT, AUCKLAND, NEW ZEALAND, TEL: +64-9-444 46 50; AUSTRALIAN SOCIETY



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WEBSITE: [www.ascc.com.au](http://www.ascc.com.au)  
Availability: NEW ZEALAND SOCIETY OF COSMETIC CHEMISTS  
(NZSCC), PO BOX 58 519, GREENMOUNT, AUCKLAND, NEW  
ZEALAND, TEL: +64-9-444 46 50

DOCUMENT TYPE: Conference  
LANGUAGE: English

AB. . . used as rheology modifier for aqueous systems and thickener/stabilizer for oil-in-water emulsions. O/W emulsions may be formulated either by combining **Aristoflex AVC** with conventional emulsifiers or by using it as single stabilizer to give surfactant-free recipes known as cream gels. **Emulsion** rheology has been studied as a function of polymer concentration. Above a certain polymer concentration emulsions and cream gels show. . . is stronger dependent on shear stress. The relevance of the rheology to skin feel and to formulation stability is discussed. **Aristoflex AVC** is easy to use as it is pre-neutralized. Characteristics which are of particular interest to the cosmetics formulator include: insensitivity. . . stability against degradation by high shear, stability towards UV light and compatibility with polar organic solvents. Cream gels based on **Aristoflex AVC** break differently on the skin, opening doors to novel galenic forms with new sensory properties. The light, melting texture of **Aristoflex AVC** cream gels is an ideal base for personal care formulations with 'fresh', 'hydrating' or 'moisturizing' claims. A significant challenge for. . . expected to be light and fast breaking, the lotion should spread easily and must adsorb fast. The following presentation features **Aristoflex AVC**, a novel polymeric sulphonic acid used as rheology modifier for aqueous systems and as thickener for oil-in-water emulsions. The structure of Ammonium Acryloyldimethyltaurate/VP Copolymer is shown in Fig. 1 in the paper. **Aristoflex AVC** is made by co-polymerization of acryloyldimethyltaurate (common abbreviation for this monomer is AMPS) and vinylpyrrolidone in the presence of ammonia. Due to the fact that the polymer is pre-neutralized, **Aristoflex AVC** is easy to use, gelling takes place immediately as the polymer is added to the water phase. What is the. . . is the cross-linking agent. The use of crosslinker generates an extremely high molecular weight of the polymer. As soon as **Aristoflex AVC** is added to water, the neutralized anionic moieties of the polymer backbone repel each other and the resulting 3-dimensional microgel network provides high viscosity and excellent yield value. **Aristoflex AVC** is particularly suitable for modern cosmetics products. A special feature of **Aristoflex AVC** is the ability to stabilize O/W emulsions that do not contain surfactant emulsifiers. We call these "cream gels". This enables. . . formulating with the traditional combination of surfactant emulsifier and polymeric thickener. This presentation describes two aspects of the properties of **Aristoflex AVC**: The first part will concentrate on the direct comparison with the widely used Carbomers, the second part will describe the. . .

L7 ANSWER 11 OF 26 KOSMET COPYRIGHT 2004 IFSCC on STN

### Full Text

ACCESSION NUMBER: 26347 KOSMET  
FILE SEGMENT: scientific, technical  
TITLE: GATEWAY TO NEW GALENIC FORMS WITH NEW SENSORIC PROPERTIES  
AUTHOR: LOFFLER M (CLARIANT GMBH, GERMANY); MILLER D  
SOURCE: 6TH INTERNATIONAL SCIENTIFIC-PRACTICAL CONFERENCE "COSMETIC PRODUCTS AND RAW MATERIALS: EFFICACY AND SAFETY", MOSCOW, RUSSIA, 20-21 NOVEMBER, 2002, 111 NO REFS ABSTRACT ONLY  
Availability: PERFUMERY AND COSMETIC ASSOCIATION OF RUSSIA

# STN Columbus

DOCUMENT TYPE: Conference  
LANGUAGE: English

AB **Emulsion** rheology and stability have been studied as a function of polymer concentration. Above a certain polymer concentration emulsions show a yield stress, which prevents creaming. The differences between conventional emulsions and cream gels are discussed. R **Aristoflex AVC** (Ammonium Acryloyldimethyltaurate/VP Copolymer) is a novel synthetic polymer used as gelling agent for aqueous systems and rheology modifier for oil-in-water. . . combining it with conventional emulsifiers or by using it as an emulsifier/thickener to give surfactant-free recipes known as cream gels. **Aristoflex AVC** opens a gateway to new galenic forms with new sensoric properties. Cream gels break differently on the skin, providing a. . .

L7 ANSWER 12 OF 26 KOSMET COPYRIGHT 2004 IFSCC on STN

Full Text

ACCESSION NUMBER: 26169 KOSMET  
FILE SEGMENT: scientific, technical  
TITLE: STABILIZING O/W SYSTEMS  
AUTHOR: LOEFFLER M (MATTHIAS LOEFFLER, DENNIS MILLER, TORSTEN HENNING, CLARIANT GMBH, FRANKFURT, GERMANY, TEL: +1-704-822-2241 OR TEL: +49-6196 757 8935); MILLER D; HENNING T  
SOURCE: HAPPI, (2002), 39, 7, 58-62, 4 REFS  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB. . . acid provides a gateway to new formulation platforms with exceptional aesthetic properties. In the article the thickener ammonium acryloyldimethyltaurate/VP copolymer (**Aristoflex AVC**) is described with its benefits and applications. **Aristoflex AVC** is not just a typical thickener, it has advantages both during the manufacture of finished products and in special formulations. . . with other viscosifying agents. As it is pre-neutralized, it is easy to incorporate in any stage of the gel or **emulsion** formation. It has excellent stability against high shear forces and UV light. It tolerates low pH-values, high amounts of polar. . .

L7 ANSWER 13 OF 26 USPATFULL on STN

Full Text

ACCESSION NUMBER: 2004:127673 USPATFULL  
TITLE: Acryoyldimethyltaurine acid-based grafted copolymers  
INVENTOR(S): Morschhaeuser, Roman, Mainz, GERMANY, FEDERAL REPUBLIC OF  
Loffler, Matthias, Niedernhausen, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004097657	A1	20040520
APPLICATION INFO.:	US 2003-433199	A1	20031110 (10)
	WO 2001-EP13857		20011128 ?

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2000-10059832	20001201
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	CLARIANT CORPORATION, INTELLECTUAL PROPERTY DEPARTMENT,	
	4000 MONROE ROAD, CHARLOTTE, NC, 28205	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1	
LINE COUNT:	358	

# STN Columbus

SUMM . . . the salts thereof were introduced into the market (EP 816 403 and WO 98/00094). In both homopolymer and copolymer form (®Aristoflex AVC, Clariant GmbH) such thickeners are superior in many respects to the corresponding polycarboxylates (Carbopols). For example, thickener systems based on. . .

SUMM [0036] The polymerization reaction can be conducted, for example, as a precipitation polymerization, **emulsion** polymerization, bulk polymerization, solution polymerization or gel polymerization. Particularly advantageous for the profile of properties of the copolymers of the. . .

DETD [0044] The polymer was prepared by the **emulsion** method in water. The monomers were emulsified in water/cyclohexane using ®Span 80, the reaction mixture was rendered inert using N<sub>2</sub>, and then, after initial heating, the reaction was initiated by addition of sodium peroxodisulfate. The polymer **emulsion** was subsequently evaporated down and by this means the polymer was isolated.

L7 ANSWER 14 OF 26 USPATFULL on STN

## Full Text

ACCESSION NUMBER: 2004:121067 USPATFULL  
 TITLE: Hydroxy acids based delivery systems for skin resurfacing and anti-aging compositions  
 INVENTOR(S): Gupta, Shyam K., Scottsdale, AZ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004092482	A1	20040513
APPLICATION INFO.:	US 2002-290933	A1	20021107 (10)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	SHYAM K. GUPTA, BIODERM RESEARCH, 5221 E. WINDROSE DRIVE, SCOTTSDALE, AZ, 85254		
NUMBER OF CLAIMS:	12		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1301		

SUMM . . . skin. Moreover, with today's state of the art it is still very difficult to formulate a lotion, cream or ointment **emulsion** which contains a free acid form of the alpha hydroxyacid, and which is physically stable as a commercial product for. . .

SUMM . . . beneficial organic heteroatom bases that can be made either in anhydrous systems, solutions, colloids, liposomes, or traditional water and oil **emulsion** systems, thus offering a wide choice of delivery systems.

SUMM . . . in-situ method possess the additional advantage that they can be made in anhydrous systems, solutions, or traditional water and oil **emulsion** systems, thus offering a wide choice of delivery systems.

SUMM . . . rheology modifiers can be used in the compositions of the present invention. The examples of rheology modifiers include, without limitation, **Aristoflex AVC** (Ammonium Acryloyldimethyltaurate/VP Copolymer), Structure Plus and Structure XL (Acrylates/Aminoacrylates/C 10-30 Alkyl PEG-20 Itaconate Copolymer), Carbomer, Xanthan Gum, Gellan Gum, Gum. . .

SUMM [0054] Dispersion. An **emulsion** or suspension. Comprise the dispersed substance and the medium it is dispersed in.

SUMM [0055] **Emulsion**. Intimate mixture of two incompletely miscible liquids.

DETD [0084]

Ingredient	Column 1	Column 2
PEG-6	to 100	to 100

# STN Columbus

Aristoflex AVC	1.00	1.00
Glycerin USP	5.00	5.00
Water	20.00	20.32
Geogard 221 (preservative)	0.50	0.50
Vitamin E Acetate	0.50	0.5
Niacinamide. . .		

DETD . . . 2 shows the final composition of the formulation.

	Column 1	Column 2
1. Carbowax 300 (PEG-6)	To	to
	100	100
2. Aristoflex AVC	0.8	0.8
3. Deionized Water	15.0	15.0
4. Niacinamide	1.22	0.0
5. Hydroquinone	4.0	4.0
6. Jeechem HPIB (silicone blend)	10.0	10.0
7. Killitol (preservative). . .		

DETD . . . final composition of the formulation.

Ingredients	Column 1	Column 2
1. Carbowax 300	to	to
	100	100
2. Aristoflex AVC	1.0	1.0
3. Glycerin	5.0	5.0
4. Deionized Water	20.0	20.0
5. Vitamin E Acetate	2.1	2.1
6. Geogard 221. . .		

DETD . . . in-situ method of the present invention.

Ingredients	Column 1	Column 2
1. Polyethylene glycol (PEG-6)	to 100	to 100
2. Aristoflex AVC	1.0	1.0
(ammonium acryloyldimethyltaurate/vp copolymer)		
3. Deionized water	15.0	15.0
4. Salicylic Acid	3.38	2.0
5. Lactic Acid	0.9	0.0
6. Niacinamide. . .		

L7 ANSWER 15 OF 26 USPATFULL on STN

## Full Text

ACCESSION NUMBER: 2004:107273 USPATFULL

TITLE: Niacinamide, niacin, and niacin esters based delivery systems for treating topical disorders of skin and skin aging

INVENTOR(S): Gupta, Shyam K., Scottsdale, AZ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004081672	A1	20040429
APPLICATION INFO.:	US 2002-280519	A1	20021025 (10)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	SHYAM K. GUPTA, BIODERM RESEARCH, 5221 E. WINDROSE DRIVE, SCOTTSDALE, AZ, 85254		
NUMBER OF CLAIMS:	29		

# STN Columbus

EXEMPLARY CLAIM: 1

LINE COUNT: 1103

SUMM . . . esters with skin beneficial organic acids that can be made either in anhydrous systems, solutions, or traditional water and oil emulsion systems, thus offering a wide choice of delivery systems.

SUMM . . . in-situ method possess the additional advantage that they can be made in anhydrous systems, solutions, or traditional water and oil emulsion systems, thus offering a wide choice of delivery systems.

SUMM . . . skin. Moreover, with today's state of the art it is still very difficult to formulate a lotion, cream or ointment emulsion which contains a free acid form of the alpha hydroxyacid, and which is physically stable as a commercial product for. . .

SUMM . . . rheology modifiers can be used in the compositions of the present invention. The examples of rheology modifiers include, without limitation, **Aristoflex AVC** (Ammonium Acryloyldimethyltaurate/VP Copolymer), Structure Plus and Structure XL (Acrylates/Aminoacrylates/C10-30 Alkyl PEG-20 Itaconate Copolymer), Carbomer, Xanthan Gum, Gellan Gum, Gum Arabic,. . .

DETD [0058]

Ingredient	Column 1	Column 2
PEG-6	to 100	to 100
<b>Aristoflex AVC</b>	1.00	1.00
Glycerin USP	5.00	5.00
Deionized Water	20.00	20.00
Geogard 221 (preservative)	0.50	0.50
Vitamin E Acetate	0.50	0.5

DETD . . . final composition of the formulation.

Column 1 Column 2

1. Carbowax 300 (PEG-6)	To 100	to 100
2. <b>Aristoflex AVC</b>	0.8	0.8
3. Deionized Water	15.0	15.0
4. Ascorbic Acid	6.0	0.0
5. Niacinamide	6.44	0.0
5. Hydroquinone	4.0	4.0

DETD . . . final composition of the formulation.

Ingredients	Column 1	Column 2
1. Carbowax 300	to 100	to 100
2. <b>Aristoflex AVC</b>	1.0	1.0
3. Glycerin	5.0	5.0
4. Deionized Water	20.0	20.0
5. Vitamin E Acetate	2.1	2.1
6. Geogard 221. . .		

DETD . . . by the in-situ method of the present invention.

Ingredients	Column 1	Column 2
1. Polyethylene glycol (PEG-6)	to 100	to 100
2. <b>Aristoflex AVC</b> (ammonium acryloyldimethyl-	1.0	1.0

## STN Columbus

taurate/vp copolymer)		
3. Deionized water	15.0	15.0
4. Salicylic Acid	3.38	2.0
5. Lipoic Acid	2.06	0.0
6. Niacinamide	2.44	0.0
7. Killitol. . .		

L7 ANSWER 16 OF 26 USPATFULL on STN

Full Text

ACCESSION NUMBER: 2004:88914 USPATFULL  
 TITLE: Ascorbic acid salts of organic bases with enhanced bioavailability for synergistic anti-aging and skin protective cosmetic compositions  
 INVENTOR(S): Gupta, Shyam K., Scottsdale, AZ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004067890	A1	20040408
APPLICATION INFO.:	US 2002-265000	A1	20021004 (10)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	SHYAM K. GUPTA, BIODERM RESEARCH, 5221 E. WINDROSE DRIVE, SCOTTSDALE, AZ, 85254		
NUMBER OF CLAIMS:	17		
EXEMPLARY CLAIM:	1		
LINE COUNT:	830		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . including an oxyethylenated sorbitan ester. This solution has a pH of 3.4. Still another similar composition comprises water in oil **emulsion** containing ascorbic acid. This **emulsion** has a pH of 3.5 or less. A disadvantage of these compositions is that a pH of 3.5 or less.

SUMM [0010] Yet a further stabilized composition comprises ascorbic acid in a water in oil **emulsion**.

SUMM . . . Gellan Gum, Gum Arabic, Bentonite, various Clays, Silicas, Fumed Silica, Zeolites, Structure Plus (Acrylates/Aminoacrylates/C10-30 Alkyl PEG-20 Itaconate Copolymer), Structure XL, **Aristoflex AVC** (Ammonium Acryloyldimethyltaurate), and such.

SUMM [0057] Dispersion. An **emulsion** or suspension. Comprise the dispersed substance and the medium it is dispersed in.

SUMM [0058] **Emulsion**. Intimate mixture of two incompletely miscible liquids.

DETD [0092]

Ingredient	Column 1	Column 2
PEG-6	54.28	54.28
<b>Aristoflex AVC</b>	1.00	1.00
Glycerin USP	5.00	5.00
Deionized Water	20.00	20.00
Geogard 221 (preservative)	0.50	0.50
Vitamin E Acetate	0.50	0.5

L7 ANSWER 17 OF 26 USPATFULL on STN

Full Text

ACCESSION NUMBER: 2004:69674 USPATFULL  
 TITLE: Process for the preparation of aqueous suspensions of anionic colloidal silica having a neutral ph and applications thereof  
 INVENTOR(S): Jacquinot, Eric, Trosly Breuil, FRANCE

## STN Columbus

Perard, Marie-Laure, Compiègne, FRANCE  
 Falk, Uwe, Bruckhobel, GERMANY, FEDERAL REPUBLIC OF  
 Henning, Torsten, Bad Soden, GERMANY, FEDERAL REPUBLIC  
 OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004052901	A1	20040318
APPLICATION INFO.:	US 2003-451931	A1	20030625 (10)
	WO 2002-IB38		20020108

	NUMBER	DATE
PRIORITY INFORMATION:	FR 2001-219	20010109
	FR 2001-13328	20010116
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	CLARIANT CORPORATION, INTELLECTUAL PROPERTY DEPARTMENT, 4000 MONROE ROAD, CHARLOTTE, NC, 28205	
NUMBER OF CLAIMS:	18	
EXEMPLARY CLAIM:	1	
LINE COUNT:	910	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		
DETD [0166] 6) The emulsion was homogenized.		
DETD . . . 4360 1		
Methylene Bis-Benzotriazolyl	Tinosorb M	3
Tetramethylbutylphenol		
Silica	neutral Klebosol	0 to 5
Cetyl Phosphate	Hostaphat CC 100	0.5
Caprylyl Methicone	SilCare 41M15	1
Ammonium	Aristoflex AVC	1
Acryloyldimethyltaurate/VP		
Copolymer		
Tocopheryl Acetate	Vitamin E acetate	1
Sodium Cocoyl Glutamate	Hostapon CCG	1
Water	Water	Ad 100
Glycerol	Glycerol	5
Citric Acid/Trisodium Citrate	Citric acid/citrate. . .	

L7 ANSWER 18 OF 26 USPATFULL on STN

Full Text

ACCESSION NUMBER: 2003:324362 USPATFULL  
 TITLE: Personal care compositions with hydroxy amine  
 neutralized polymers  
 INVENTOR(S): Faryniarz, Joseph Raymond, Middlebury, CT, UNITED  
 STATES  
 Zhang, Joanna Hong, Milford, CT, UNITED STATES  
 Miner, Philip Edward, Newtown, CT, UNITED STATES  
 PATENT ASSIGNEE(S): Unilever Home Personal Care USA, Division of Conopco,  
 Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003228337	A1	20031211
APPLICATION INFO.:	US 2002-235622	A1	20020905 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-383850P	20020529 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	UNILEVER, PATENT DEPARTMENT, 45 RIVER ROAD, EDGEWATER,	

## STN Columbus

NJ, 07020  
 NUMBER OF CLAIMS: 9  
 EXEMPLARY CLAIM: 1  
 LINE COUNT: 571

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . are water, emollients, fatty acids, fatty alcohols, humectants, thickeners and combinations thereof. The carrier may be aqueous, anhydrous or an **emulsion**. Preferably the compositions are aqueous, especially water and oil emulsions of the W/O or O/W variety. Water when present may. . .

SUMM . . . selected having regard for the use of the composition and possible incompatibilities between the preservatives and other ingredients in the **emulsion**. Preservatives are preferably employed in amounts ranging from 0.01% to 2% by weight of the composition.

DETD . . . Oleate	1.00
Sodium C14-16 Olefin Sulfonate	15.00
Sodium Lauryl Ether Sulphate (25% active)	15.00
Cocoamidopropylbetaine	15.00
DC 1784 ® (Silicone <b>Emulsion</b> 50%)	5.00
Polyquaternium-11	1.00
DMAE Salt of <b>Aristoflex AVC</b> ®	1.00
Water	Balance

L7 ANSWER 19 OF 26 USPATFULL on STN

Full Text

ACCESSION NUMBER: 2003:311804 USPATFULL  
 TITLE: Stable dispersion concentrates  
 INVENTOR(S): Loeffler, Matthias, Niedernhausen, GERMANY, FEDERAL  
 REPUBLIC OF  
 Morschhauser, Roman, Mainz, GERMANY, FEDERAL REPUBLIC  
 OF  
 Da Rocha, Livio Caribe, Sao Paulo - SP, BRAZIL  
 PATENT ASSIGNEE(S): Clariant GmbH (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003219398	A1	20031127
APPLICATION INFO.:	US 2003-388078	A1	20030313 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2002-10211140	20020314
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	CLARIANT CORPORATION, INTELLECTUAL PROPERTY DEPARTMENT, 4000 MONROE ROAD, CHARLOTTE, NC, 28205	
NUMBER OF CLAIMS:	11	
EXEMPLARY CLAIM:	1	
LINE COUNT:	398	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM [0036] The dispersion concentrates according to the invention can be prepared in various ways, an inverse **emulsion** polymerization or an inverse mini-**emulsion** polymerization being as preferred as a physical mixing of copolymer with oil and emulsifier and optionally water. The physical mixing. . .

SUMM [0043] Various dispersion concentrates with differing emulsifier and oil concentration were prepared. For this, ®**Aristoflex AVC** and ®**Aristoflex AVC-1** (Clariant) were used.

SUMM . . . storage-stable (sedimentation upon storage at 25° C. for 3 weeks).



## STN Columbus

		A	B	C	D	E	F	G	H
1	<b>Aristoflex AVC</b>	36	36	36	30				
2	<b>Aristoflex AVC-1</b>					36	36	36	30
3	Hostacerin DGI		30	3	51		30	3	51
4	Hostaphat KL 340 D	18	18	2	13.	.	.		
SUMM	[0050] Structure of the commercial products used:								

## INCI name

1	<b>Aristoflex AVC</b>	Ammonium Acryloyldimethyltaurate/VP Copolymer
2	<b>Aristoflex AVC-1</b>	Ammonium Arcryloyldimethyltaurate/Vinylformamide Copolymer
3	Hostacerin DGI	Polyglyceryl-2-Sesquiosostearate
4	Hostaphat KL 340 D	Trilaureth-4 Phosphate
5	Emulsogen SRO	Rapeseed Oil Sorbitol Esters
6		Mineral. . .
DETD	[0067] III Homogenize	<b>emulsion</b>

L7 ANSWER 20 OF 26 USPATFULL on STN

Full Text

ACCESSION NUMBER: 2003:296750 USPATFULL

TITLE: Water-soluble polymers and their use in cosmetic and pharmaceutical compositions

INVENTOR(S): Morschhauser, Roman, Mainz, GERMANY, FEDERAL REPUBLIC OF  
Loffler, Matthias, Niedernhausen, GERMANY, FEDERAL REPUBLIC OF

PATENT ASSIGNEE(S): Clariant GmbH, Frankfurt, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US <u>6645476</u> ✓	B1	20031111
APPLICATION INFO.:	US 2000-616253		20000714 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1999-19933066	19990715
	DE 2000-10029462	20000621
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Page, Thurman K.	
ASSISTANT EXAMINER:	Fubara, Blessing	
LEGAL REPRESENTATIVE:	Jackson, Susan B., Silverman, Richard P.	
NUMBER OF CLAIMS:	76	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Figure(s); 3 Drawing Page(s)	
LINE COUNT:	1345	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD The polymers according to the invention are prepared by free-radical copolymerization, such as, for example, precipitation polymerization, **emulsion** polymerization, solution polymerization or suspension polymerization. Preference is given to precipitation polymerization, particular preference to precipitation polymerization in tert-butanol.

DETD 3=creaming +oil or water +creaming, homogeneous **emulsion** inbetween

DETD 9=completely homogeneous **emulsion**

DETD . . . viscosity 5.00%

## STN Columbus

® Miglyol 812 (Dynamit Nobel) 4.00%

Caprylic/capric triglycerides

Isopropyl palmitate 6.00%

Soybean oil 3.00%

Jojoba oil 2.00%

B ® Aristoflex AVC (Clariant) 30%

AMPS/VIFA copolymer

C ® Hostapon KCG (Clariant) 1.00%

Sodium cocoyl glutamate

Water ad 100%

Glycerol 3.00%

Sodium hydroxide (10% . . . water) 1.20%

D Fragrances 0.30%

Preparation

I Stir B into A, add C and stir well

II Stir D into I

III Homogenize the emulsion

DETD . . . 1 0.50%

Isopropyl palmitate 4.00%

Almond oil 4.00%

Wheatgerm oil 1.00%

® Cetiol SN (Henkel) 8.00%

Cetearyl isononanoate

B ® Aristoflex AVC (Clariant) 0.30%

AMPS/VIFA copolymer

C Water ad 100%

D Fragrances 0.30%

Preparation

I Mix A and B, then add C

II Stir D into I

III Homogenize the emulsion

DETD . . . oil 0.30%

Preparation

I Stir the components of A until homogeneous

II At about 35° C., stir D into I

III Homogenize the emulsion

CLM What is claimed is:

45. An aqueous preparation, aqueous-alcoholic preparation, aqueous/surface-active preparation, emulsion or suspension comprising polymers as claimed in claim 1.

46. An aqueous preparation, aqueous-alcoholic preparation, aqueous/surface-active preparation, emulsion or suspension comprising polymers as claimed in claim 12.

47. An aqueous preparation, aqueous-alcoholic preparation, aqueous/surface-active preparation, emulsion or suspension comprising polymers as claimed in claim 23.

48. An aqueous preparation, aqueous-alcoholic preparation, aqueous/surface-active preparation, emulsion or suspension comprising polymers as claimed in claim 34.

49. The preparation, emulsion or suspension as claimed in claim 45, which is a cosmetic or pharmaceutical composition.

50. The preparation, emulsion or suspension as claimed in claim 46, which is a cosmetic or pharmaceutical composition.

51. The preparation, emulsion or suspension as claimed in claim 47, which is a cosmetic or pharmaceutical composition.

# STN Columbus

52. The preparation, **emulsion** or suspension as claimed in claim 48, which is a cosmetic or pharmaceutical composition.

53. The preparation, **emulsion** or suspension as claimed in claim 45, which, based on the finished formulation, comprises 0.05 to 10% by weight of. . .

54. The preparation, **emulsion** or suspension as claimed in claim 46, which, based on the finished formulation, comprises 0.05 to 10% by weight of. . .

55. The preparation, **emulsion** or suspension as claimed in claim 47, which, based on the finished formulation, comprises 0.05 to 10% by weight of. . .

56. The preparation, **emulsion** or suspension as claimed in claim 48, which, based on the finished formulation, comprises 0.05 to 10% by weight of. . .

. . . the method comprising adding the polymer as a thickener, dispersing agent, suspending agent, emulsifier, stabilizer and/or bodying agent to an **emulsion**.

. . . the method comprising adding the polymer as a thickener, dispersing agent, suspending agent, emulsifier, stabilizer and/or bodying agent to an **emulsion**.

. . . the method comprising adding the polymer as a thickener, dispersing agent, suspending agent, emulsifier, stabilizer and/or bodying agent to an **emulsion**.

. . . the method comprising adding the polymer as a thickener, dispersing agent, suspending agent, emulsifier, stabilizer and/or bodying agent to an **emulsion**.

L7 ANSWER 21 OF 26 USPATFULL on STN

## Full Text

ACCESSION NUMBER: 2003:245065 USPATFULL  
 TITLE: Composition containing a silicone copolymer and an  
 amps-like polymer and/or organic powder  
 INVENTOR(S): Lennon, Paula, Lyon, FRANCE  
 PATENT ASSIGNEE(S): L'OREAL, Paris, FRANCE (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003171479	A1	20030911
APPLICATION INFO.:	US 2003-334979	A1	20030102 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	FR 2002-97	20020104
	FR 2002-99	20020104
	FR 2002-95	20020104
	FR 2002-96	20020104
	US 2002-356143P	20020214 (60)
	US 2002-356177P	20020214 (60)
	US 2002-356142P	20020214 (60)
	US 2002-355823P	20020213 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	OBLON, SPIVAK, MCCLELLAND, MAIER NEUSTADT, P.C., 1940 DUKE STREET, ALEXANDRIA, VA, 22314	
NUMBER OF CLAIMS:	48	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1863	

## STN Columbus

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

- SUMM . . . provide a moisturizing effect and an emollient effect, current cosmetic compositions are most often provided in the form of an **emulsion** containing an aqueous phase and an oily phase. Depending on the direction of the dispersion, it may be an oil-in-water (O/W) type **emulsion** consisting of an aqueous dispersing continuous phase and an oily dispersed discontinuous phase, or a water-in-oil (W/O) type **emulsion** consisting of an oily dispersing continuous phase and an aqueous dispersed discontinuous phase. O/W emulsions are the most in demand. . . .
- SUMM . . . polymer or copolymer of 2-acrylamido-2-methylpropanesulphonic acid (AMPS), and/or of at least one organic powder in a composition containing particles in **emulsion** as described, for example, in EP-A-874017 makes it possible to reduce the sticky effect associated with application of such emulsions. . . .
- SUMM . . . "particles" is understood to mean the block silicone copolymer globules which are in dispersion in water and form a silicone-in-water **emulsion**.
- SUMM [0017] The aqueous dispersion of particles of block copolymer is a silicone-in-water **emulsion** (Sil/W) wherein the oily globules are constituted from a silicone of high viscosity, so that these globules seem to form. . . .
- SUMM . . . for example, those obtained from AMPS and acrylamide or methylacrylamide, such as for example the acrylamide/sodium acrylamido-2-methylpropanesulphonate copolymer in inverse **emulsion** at 40% in polysorbate, marketed under the name SIMULGEL 600 by the company SEPPIC. Suitable copolymers also include, for example, copolymers of AMPS and vinylpyrrolidone or of vinylformamide, such as the products marketed under the name **ARISTOFLEX AVC** by the company CLARIANT.
- SUMM . . . organic powder may be introduced into the composition after mixing the other constituents. For example, in the case of an **emulsion**, the organic powder may be introduced after preparation of the **emulsion**, or alternatively, if an oily phase is present, into the oily phase of the composition. The organic powder may also be introduced during the preparation of the **emulsion**, into the aqueous phase or into the oily phase.
- SUMM [0111] According to a preferred embodiment of the invention, the composition is provided in the form of an **emulsion**, most preferably an O/W **emulsion**.
- SUMM . . . weight relative to the total weight of the composition, particularly when the composition is provided in the form of an **emulsion**.
- SUMM [0117] When the composition is in the form of an **emulsion**, the proportion of the oily phase of the **emulsion** may range, for example, from 5 to 80% by weight, preferably from 5 to 50% by weight, relative to the . . . weight of the composition. The oils, the emulsifiers and the coemulsifiers used in the composition in the form of an **emulsion** are chosen from those conventionally used in the cosmetic or dermatological field. The emulsifier and coemulsifier are preferably present in. . . . to 30% by weight, preferably from 0.5 to 20% by weight relative to the total weight of the composition. The **emulsion** may, in addition, contain lipid vesicles.
- SUMM . . . or non-ionic emulsifiers, used alone or in the form of a mixture. The emulsifiers are appropriately chosen according to the **emulsion** to be obtained (W/O or O/W).
- SUMM [0130] When the composition is provided in the form of an **emulsion**, the nature of the oily phase of the **emulsion** is not critical. The oily phase may thus consist of all the fatty substances and in particular the oils conventionally. . . .
- SUMM . . . inorganic filler may be introduced into the composition after mixing the other constituents. For example, in the case of an **emulsion**, it may be introduced after preparing the **emulsion**, or

# STN Columbus

alternatively if an oily phase is present, into the oily phase of the composition.

DETD O/W Emulsion

DETD . . . Petroleum jelly paste		10%
Stearic acid	0.5%	
Phase B (aqueous phase)		
Glycerine	5%	
Acrylamide/sodium acrylamido-2-methylpropane-sulphonate copolymer in inverse emulsion at 40% in polysorbate (Simulgel 600 from the company Seppic)	1%	
Preservative	qs %	
Water	qs 100%	
Phase C		
HMW2220 (Dow. . . .)		

DETD O/W Emulsion

DETD O/W Emulsion

DETD W/O Emulsion

DETD . . . .

Phase A

Glycerine	4%
Propylene glycol	3%
Preservative	qs %
Acrylamide/sodium acrylamido-2-methylpropane-sulphonate copolymer in inverse emulsion at 40% in polysorbate (Simulgel 600 from the company SEPPIC)	1.5%
Methyl methacrylate/ethylene glycol	
Dimethacrylate copolymer powder (Microspheres M305 from. . . .)	1%

DETD O/W Emulsion

DETD . . . . B, with stirring. Next, phase C is introduced into the mixture obtained. The mixing is carried out until a fine emulsion is obtained and it is cooled. At 25° C., phase D and then phase E are introduced, with gentle stirring.

DETD [0246] After three weeks at 50° C., the emulsion remained stable and it exhibits no phase release or separation. In addition, the variation of the colour (yellowing) is a. . . .

DETD O/W Emulsion

DETD . . . . B, with stirring. Next, phase C is introduced into the mixture obtained. The mixing is carried out until a fine emulsion is obtained and it is cooled. At 25° C., phase D is introduced, with gentle stirring.

DETD [0250] After three weeks at 50° C., the emulsion is destabilized and there is release of oil and of water at the bottom of the pot containing the emulsion. In addition, the composition has become intensely yellow.

DETD O/W Emulsion

DETD . . . . B, with stirring. Next, phase C is introduced into the mixture obtained. The mixing is carried out until a fine emulsion is obtained and it is cooled. At 25° C., phase D is introduced, with gentle stirring.

DETD [0254] After three weeks at 50° C., the emulsion is destabilized and there is a very substantial release of oil and a substantial release of water at the bottom of the pot containing the emulsion. In addition, the composition has become intensely yellow.

DETD O/W Emulsion

DETD . . . . oil		4%
Cyclohexadimethylsiloxane	5%	
Cyclopentadimethylsiloxane/dimethiconol	5%	

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(DC2-9071 from Dow Corning) (silicone gum)

Vitamin E	0.25%
Retinol palmitate	0.1%
Phase B (aqueous phase)	
AMPS/sodium acrylate copolymer in inverse emulsion (SIMULGEL EG from the company SEPPIC)	1.5%
Glycerine	7%
Hostacerin AMPS	0.5%
Preservative	qs
Colourant	qs
Water	qs 100%
Phase C	
HMW2220 (Dow Corning) (aqueous dispersion at 60%). . .	2%

DETD . . . preservatives and colourant therein, by adding the Hostacerin AMPS and by maintaining the stirring until gel formation is obtained. The emulsion is prepared by pouring phase A at 60° C. into phase B at 65° C., with stirring, and then the . . .

DETD [0261] A fluid is obtained as an emulsion which has a surprising effect of smoothness and comfort and which can be used in the morning and/or in the . . .

DETD W/O Emulsion (Cast)

CLM What is claimed is:

35. The composition according to claim 1, wherein the composition is in the form of an O/W emulsion.

L7 ANSWER 22 OF 26 USPATFULL on STN

## Full Text

ACCESSION NUMBER: 2002:314361 USPATFULL

TITLE: O/W emulsions containing one or more ammonium acryloyldimethyltaurate/vinylpyrrolidone copolymers

INVENTOR(S): Lanzendorfer, Ghita, Hamburg, GERMANY, FEDERAL REPUBLIC OF  
Bormann, Angelika, Hamburg, GERMANY, FEDERAL REPUBLIC OF  
Nielsen, Jens, Henstedt-Ulzburg, GERMANY, FEDERAL REPUBLIC OF  
Hargens, Birgit, Hamburg, GERMANY, FEDERAL REPUBLIC OF  
Riedel, Heidi, Hamburg, GERMANY, FEDERAL REPUBLIC OF  
von Thaden, Stephanie, Hamburg, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002176832	A1	20021128
APPLICATION INFO.:	US 2001-25065	A1	20011219 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2000-10065046	20001223
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WILLIAM GERSTENZANG, NORRIS, MCLAUGHLIN MARCUS, P.A., 220 EAST 42ND STREET, 30TH FLOOR, NEW YORK, NY, 10017	
NUMBER OF CLAIMS:	5	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1060	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . usually referred to as phases, which are immiscible or miscible with one another only to a limited extent. In an emulsion, one of the two liquids is dispersed in the form of very fine droplets in the other

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liquid.

SUMM . . . the two liquids are water and oil and oil droplets are very finely dispersed in water, this is an oil-in-water **emulsion** (O/W **emulsion**, e.g. milk). The basic character of an O/W **emulsion** is determined by the water. In the case of a water-in-oil **emulsion** (W/O **emulsion**, e.g. butter), the principle is reversed, the basic character being determined here by the oil.

SUMM . . . 5 to 10% by weight, where the results achieved are equally favorable. In the case of freedom from lipid, no **emulsion** is present, but rather a system which should most appropriately be referred to as an emulsifier gel.

SUMM . . . of a liquid composition which can be applied by means of roll-on devices, but also in the form of an **emulsion** which can be applied from normal bottles and containers.

DETD . . .

% by wt

PEG-30 glyceryl stearate	2.50
Glycerol monostearate	1.00
Cetyl alcohol	1.00
Vaseline	2.50
Polyisobutene	8.00
Cyclomethicone	5.00
<b>Aristoflex AVC</b>	0.20
Glycerol	5.00
Tocopherol acetate	1.00
Perfume, preservatives, NaOH, dyes, antioxidants etc.	q.s.
Water	ad 100.00

DETD [0182]

% by wt.

Glyceryl stearate citrate	2.50	
Cetyl alcohol	1.00	
Caprylic/capric triglycerides	5.00	
Cyclomethicone	5.00	
Octyldodecanol	5.00	
<b>Aristoflex AVC</b>	0.30	
Glycerol	3.00	
Perfume, preservatives, NaOH, dyes, antioxidants etc.	q.s.	
Water	ad 100.00	

DETD . . . Myristyl alcohol 1.00

Glycerol monostearate	0.50
Paraffin oil, subliquidum	10.00
Dimethicone	1.00
Octyldodecanol	2.00
Hydrogenated coconut fatty acid glycerides	0.50
<b>Aristoflex AVC</b>	0.30
Serine	0.50
Glycerol	5.00
Tocopherol acetate	0.50
Perfume, preservatives, NaOH, dyes, antioxidants etc.	q.s.
Water	ad 100.00

DETD . . . 0.35

Cetylmethicone copolyol	0.15
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	Paraffin oil, subliquidum	10.00
	Octyldodecanol	4.00
	Hydrogenated coconut fatty acid glycerides	1.00
	Cyclomethicone	1.00
	Dimethicone	1.00
	<b>Aristoflex AVC</b>	0.30
	Glycerol	5.00
	Tocopherol acetate	1.00
	Perfume, preservatives, NaOH	q.s.
	dyes, antioxidants etc.	
	Water	ad 100.00
DETD	<b>Emulsion Make-Up</b>	
DETD	. . . PEG-30 stearate	2.00
	Glycerol monostearate	1.00
	Paraffin oil, subliquidum	7.00
	Octyldodecanol	7.00
	Isopropyl lanolate	4.00
	Octyl methoxycinnamate	2.00
	Butylmethoxydibenzoylmethane	1.00
	<b>Aristoflex AVC</b>	0.20
	Glycerol	5.00
	1,3-Butylene glycol	2.00
	Tocopherol acetate	1.00
	Starch sodium octenyl succinate	2.50
	Magnesium silicate	1.00
	Mica	1.00
	Iron. . .	
DETD	. . . % by wt.	
	Stearic acid	1.20
	Isopropyl lanolate	1.20
	Dimethicone	0.40
	Hydrogenated palm fatty acid glycerides	1.70
	Color pigments	20.00
	<b>Aristoflex AVC</b>	0.25
	Magnesium aluminum silicate	0.30
	1,3-Butylene glycol	4.00
	Triethanolamine	0.40
	Ethanol	10.00
	Perfume, preservatives, antioxidants, etc.	q.s.
	Water	ad 100.00
DETD	. . . pigments	10.00
	Cyclomethicone	25.00
	Dimethicone	10.00
	1,3-Butylene glycol	4.50
	Glycerol	3.50
	Polysorbate 40	3.50
	Decyl oleate	2.00
	Na hyaluronate	0.10
	<b>Aristoflex AVC</b>	0.30
	Perfume, preservatives, NaOH,	q.s.
	dyes, antioxidants, etc.	
	Water	ad 100.00
CLM	What is claimed is:	
	1. A cosmetic or dermatological <b>emulsion</b> of the oil-in-water type, comprising (i) up to 90% by weight of a water phase, (ii) up to 40% by. . .	
	2. The <b>emulsion</b> as claimed in claim 1, wherein its lipid content is chosen from the range from 0.5% by weight to 20%. . .	
	3. The <b>emulsion</b> as claimed in claim 1, wherein its lipid content is up to 7.5% by weight.	



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4. The **emulsion** as claimed in claim 1, which comprises one or more dyes and/or coloring pigments.

5. The **emulsion** as claimed in claim 4, wherein the total amount of the dyes and coloring pigments is chosen from the range. . .

L7 ANSWER 23 OF 26 USPATFULL on STN

## Full Text

ACCESSION NUMBER: 2002:279645 USPATFULL  
 TITLE: Gel creams in the form of O/W emulsions containing one or more ammonium acryloyldimethyltaurate/vinylpyrrolidone copolymers  
 INVENTOR(S): Lanzendorfer, Ghita, Hamburg, GERMANY, FEDERAL REPUBLIC OF  
 Nielsen, Jens, Henstedt-Ulzburg, GERMANY, FEDERAL REPUBLIC OF  
 Hargens, Birgit, Hamburg, GERMANY, FEDERAL REPUBLIC OF  
 Kropke, Rainer, Schenefeld, GERMANY, FEDERAL REPUBLIC OF  
 Riedel, Heidi, Hamburg, GERMANY, FEDERAL REPUBLIC OF  
 von Thaden, Stephanie, Hamburg, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002155076	A1	20021024
	US 6620420 ✓	B2	20030916
APPLICATION INFO.:	US 2001-25062	A1	20011219 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2000-10065047	20001223
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WILLIAM GERSTENZANG, NORRIS, MCLAUGHLIN MARCUS, P.A., 220 EAST 42ND STREET, 30TH FLOOR, NEW YORK, NY, 10017	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1086	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . usually referred to as phases, which are immiscible or miscible with one another only to a limited extent. In an **emulsion**, one of the two liquids is dispersed in the form of very fine droplets in the other liquid.

SUMM . . . the two liquids are water and oil and oil droplets are very finely dispersed in water, this is an oil-in-water **emulsion** (O/W **emulsion**, e.g. milk). The basic character of an O/W **emulsion** is determined by the water. In the case of a water-in-oil **emulsion** (W/O **emulsion**, e.g. butter), the principle is reversed, the basic character being determined here by the oil.

DETD . . . 5 to 10% by weight, where the results achieved are equally favorable. In the case of freedom from lipid, no **emulsion** is present, but rather a system which should most appropriately be referred to as an emulsifier gel.

DETD . . . of a liquid composition which can be applied by means of roll-on devices, but also in the form of an **emulsion** which can be applied from normal bottles and containers.

DETD . . . the total weight of the respective preparations.

% by wt

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Example 1 (hydrodispersion gel):	
PEG-8 (polyethylene glycol 400)	5.00
Ethanol	10.00
<b>Aristoflex AVC</b>	0.70
Triglyceride, liquid	1.50
Glycerol	5.00
Panthenol	0.50
Tocopherol acetate	0.50
Perfume, preservatives, NaOH, dyes, antioxidants etc.	q.s.
Water	ad 100.00
Example 2 (hydrodispersion gel):	
Xanthan gum	0.20
<b>Aristoflex AVC</b>	1.00
Glycerol	5.00
1,3-Butylene glycol	2.00
Dimethicone	3.00
Isopropyl palmitate	1.50
Perfume, preservatives, NaOH, dyes, antioxidants, pigments etc.	q.s.
Water	ad 100.00
Example 3:	
Sucrose stearate	1.00
Cetearyl alcohol	0.50
PEG-5 soyasterol	2.00
Tocopherol	1.00
<b>Aristoflex AVC</b>	1.00
Glycerol	3.00
EDTA	0.50
Antioxidants, preservatives, neutralizing agents, perfume, dyes, pigments	q.s.
Water	ad 100.00
Example 4:	
Glycerol monostearate	2.00
PEG-40 glyceryl stearate	0.50
<b>Aristoflex AVC</b>	1.00
Magnesium aluminum silicate	0.30
Glycerol	5.00
1,3-Butylene glycol	2.00
Panthenol	2.50
Perfume, preservatives, NaOH, complexing agent, dyes, antioxidants, pigments etc.	q.s.
Water	ad 100.00
Example 5:	
Glyceryl stearate citrate	1.50
Cetyl alcohol	0.50
Jojoba oil	2.00
<b>Aristoflex AVC</b>	0.50
Chitosan	0.50
Lactic acid (90% strength)	0.30
Glycerol	5.00
Perfume, preservatives, NaOH, dyes, antioxidants, pigments etc.	q.s.
Water	ad 100.00
Example 6:	
Polyglyceryl-3 methylglucose distearate	2.00
Sorbitan stearate	0.50
Glycerol	3.00
C12-15-Alkyl benzoates	5.00
Caprylic/capric triglycerides	3.00

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**Aristoflex AVC** 0.50  
 Perfume, preservatives, NaOH, dyes, q.s.  
 antioxidants, pigments etc.  
 Water ad 100.00  
 Example 7:  
 Decyl glucoside 1.00  
 Glyceryl lanolate 1.50  
 Dimethicone copolyol 2.00  
 Triceteareth-4 phosphate 0.70  
 Panthenol 1.50  
 Isopropyl palmitate 1.00  
**Aristoflex AVC** 1.00  
 Perfume, preservatives, NaOH, q.s.  
 dyes, antioxidants, pigments etc.  
 Water ad 100.00  
 Example 8:  
 Stearyl alcohol 2.00  
 Caprylic/capric triglycerides 2.00  
 Paraffin oil 2.00  
 Octyldodecanol 3.00  
 Glycerol 3.00  
 Acrylates/C10-30-alkyl acrylate cross polymer 0.15  
**Aristoflex AVC** 0.20  
 Tocopheryl acetate 0.50  
 Perfume, preservatives, NaOH, q.s.  
 dyes, antioxidants, pigments etc.  
 Water, demineralized ad 100.00

L7 ANSWER 24 OF 26 USPATFULL on STN

Full Text

ACCESSION NUMBER: 2002:112322 USPATFULL  
 TITLE: Gelled aqueous cosmetic compositions  
 INVENTOR(S): Zecchino, Jules, Closter, NJ, UNITED STATES  
 Matathia, Michelle, Syosset, NJ, UNITED STATES  
 Knight, E. Althea, Teaneck, NJ, UNITED STATES  
 Harrison, James T., Forest Hills, NY, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002058055	A1	20020516 ✓
APPLICATION INFO.:	US 2001-995358	A1	20011126 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-510756, filed on 22 Feb 2000, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	KAREN A. LOWNEY, ESQ., ESTEE LAUDER COMPANIES, 125 PINELAWN ROAD, MELVILLE, NY, 11747		
NUMBER OF CLAIMS:	21		
EXEMPLARY CLAIM:	1		
LINE COUNT:	330		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . ammonium poly(acryldimethyltauramide-co-vinylformamide), also referred to as AMPS/VIFA copolymer, available commercially from Clariant Corporation, Charlotte, N.C. under the name trade name **Aristoflex AVC®**. The polymer is known as a gelling agent. However, unexpectedly, the gellant is substantially unaffected by the presence of salts. . . .

SUMM . . . amount of oil, particularly silicone oils, into water, with the use of a fairly small amount of surfactants. Unlike an **emulsion**, these foams are generally unstable, or insufficiently stable to be very useful in most cosmetic formulations, since the foam tends. . . .

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L7 ANSWER 25 OF 26 USPATFULL on STN

## Full Text

ACCESSION NUMBER:

2001:162860 USPATFULL

TITLE:

Antimicrobial compositions comprising a benzoic acid analog and a metal salt

INVENTOR(S):

Beerse, Peter William, The Procter Gamble Company,  
Miami Valley Laboratories, P.O. Box 538707, Cincinnati,  
OH, United States 45253-8707  
Biedermann, Kimberly Ann, The Procter Gamble Company,  
Miami Valley Laboratories, P.O. Box 538707, Cincinnati,  
OH, United States 45253-8707  
Page, Steven Hardy, The Procter Gamble Company, Miami  
Valley Laboratories, P.O. Box 538707, Cincinnati, OH,  
United States 45253-8707  
Mobley, Michael Joseph, The Procter Gamble Company,  
Miami Valley Laboratories, P.O. Box 538707, Cincinnati,  
OH, United States 45253-8707  
Morgan, Jeffrey Michael, The Procter Gamble Company,  
Miami Valley Laboratories, P.O. Box 538707, Cincinnati,  
OH, United States 45253-8707

NUMBER	KIND	DATE
US 6294186	B1	20010925
US 1999-421084		19991019 (9)

PATENT INFORMATION:  
APPLICATION INFO.:  
RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. US 1997-868783, filed on 4 Jun 1997, now patented, Pat. No. US 5968539  
Continuation-in-part of Ser. No. US 1997-969049, filed on 12 Nov 1997, now patented, Pat. No. US 6190675  
Continuation-in-part of Ser. No. US 1997-868695, filed on 4 Jun 1997, now abandoned Continuation-in-part of Ser. No. US 1997-868982, filed on 4 Jun 1997, now patented, Pat. No. US 6183757 Continuation-in-part of Ser. No. US 1999-323419, filed on 1 Jun 1999  
Continuation-in-part of Ser. No. US 1997-869302, filed on 4 Jun 1997, now abandoned Continuation-in-part of Ser. No. US 1999-323420, filed on 1 Jun 1999, now patented, Pat. No. US 6106851 Continuation-in-part of Ser. No. US 1997-869300, filed on 4 Jun 1997, now abandoned Continuation-in-part of Ser. No. US 1999-323513, filed on 1 Jun 1999, now patented, Pat. No. US 6113933 Continuation-in-part of Ser. No. US 1997-869071, filed on 4 Jun 1997, now abandoned Continuation-in-part of Ser. No. US 1997-869116, filed on 4 Jun 1997, now patented, Pat. No. US 6197315  
Continuation-in-part of Ser. No. US 1997-969057, filed on 12 Nov 1997 Continuation-in-part of Ser. No. US 1997-868688, filed on 4 Jun 1997, now abandoned Continuation-in-part of Ser. No. US 1997-868687, filed on 4 Jun 1997, now patented, Pat. No. US 6183763  
Continuation-in-part of Ser. No. US 1997-868717, filed on 4 Jun 1997, now patented, Pat. No. US 6258368  
Continuation-in-part of Ser. No. US 1997-869301, filed on 4 Jun 1997, now abandoned Continuation-in-part of Ser. No. US 1997-967972, filed on 12 Nov 1997  
Continuation-in-part of Ser. No. US 1997-868718, filed on 4 Jun 1997, now abandoned Continuation-in-part of Ser. No. US 1999-323531, filed on 1 Jun 1999  
Continuation-in-part of Ser. No. US 1997-869303, filed on 4 Jun 1997, now abandoned Continuation-in-part of Ser. No. US 1997-869129, filed on 4 Jun 1997  
Continuation-in-part of Ser. No. US 1997-969077, filed

# STN Columbus

on 12 Nov 1997 Continuation-in-part of Ser. No. US  
1997-869304, filed on 4 Jun 1997, now abandoned  
Continuation-in-part of Ser. No. US 1997-869117, filed  
on 4 Jun 1997, now patented, Pat. No. US 6190674

DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Dodson, Shelley A.  
LEGAL REPRESENTATIVE: Kendall, Dara M., Tsuneki, Fumiko, Hilton, Michael E.  
NUMBER OF CLAIMS: 49  
EXEMPLARY CLAIM: 1  
LINE COUNT: 3559  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . of forms. For example, the carrier may be an aqueous-based  
solution or cleanser, an alcohol-based solution or gel or an **emulsion**  
carrier, including, but not limited to, oil-in-water, water-in-oil,  
water-in-oil-in-water, and oil-in-water-in-silicone emulsions. The  
carrier solution containing the benzoic acid analog. . . .

SUMM Suitable carriers may also comprise a water containing (i.e. non-alcohol  
based) **emulsion** such as oil-in-water emulsions, water-in-oil  
emulsions, and water-in-silicone emulsions. As will be understood by the  
skilled artisan, a given component. . . .

SUMM The **emulsion** may also contain an anti-foaming agent to minimize  
foaming upon application to the surface to be treated. Anti-foaming  
agents include. . . .

SUMM a) Water-in-silicone **emulsion**

SUMM . . . about 50% to about 85%, and most preferably from about 70% to  
about 80% of a dispersed aqueous phase. In **emulsion** technology, the  
term "dispersed phase" is a term well-known to one skilled in the art  
which means that the phase. . . .

SUMM . . . 1995; M. E. Carlotti et al., "Optimization of W/O-S Emulsions  
And Study Of The Quantitative Relationships Between Ester Structure And  
**Emulsion** Properties," J. Dispersion Science And Technology, 13(3),  
315-336 (1992); P. Hameyer, "Comparative Technological Investigations of  
Organic and Organosilicone Emulsifiers in Cosmetic Water-in-Oil  
**Emulsion** Preparations," HAPPI 28(4), pp. 88-128 (1991); J. Smid-Korbar  
et al., "Efficiency and usability of silicone surfactants in emulsions,"  
Provisional Communication.. . .

SUMM . . . 17, 1991, and U.S. Pat. No. 5,073,372, to Turner, D. J. et al.,  
issued Dec. 17, 1991. A preferred oil-in-water **emulsion**, containing a  
structuring agent, hydrophilic surfactant and water, is described in  
detail hereinafter.

SUMM A preferred oil-in-water **emulsion** comprises a structuring agent to  
assist in the formation of a liquid crystalline gel network structure.  
Without being limited by. . . .

SUMM . . . these references are incorporated herein by reference in their  
entirety. Such surfactants may be used as a component of the **emulsion**  
form of the present compositions or they may be used in alternative  
product forms, e.g., aqueous or alcohol solution carrier. . . .

SUMM The oil-in-water **emulsion** form of the present compositions may  
comprise from about 25% to about 98%, preferably from about 65% to about  
95%,. . . .

SUMM Other polymers are useful for thickening the compositions of the present  
invention including acrylamidomethylpropane sulfonic acid based  
copolymers (for example **Aristoflex AVC** from Hoechst Celanese),  
synthetics clays (e.g., Laponite XLG from Southern Clay), hydroxypropyl  
gums (e.g., Jaguar HP60 and HP120 from Rhone-Poulenc),. . . .

DETD . . . --  
amine oxide  
Hydroxypropyl cellulose 0.75 -- -- -- --  
(Klucel HF)  
Polyacrylamide -- 2.5% -- --  
(Seppigel 305)

## STN Columbus

Acrylamidomethyl- -- -- 2.00 -- --  
 propane Sulfonic acid  
 (Aristoflex AVC)  
 Nomcort Z Xanthan Gum -- -- 0.30 -- --  
 Jaguar HP120 -- -- -- -- 1.00  
 Triclosan -- -- 0.20 -- --  
 NaOH/HCl to. . .

DETD Add xanthan gum to all but 5% of water. Heat to 80° C. to hydrate. Add **Aristoflex AVC**. Mix to disperse/swell polymer. Add ethanol in aliquots, allowing mixture to thicken in between ethanol additions. Add salicylic acid, metal. . .

L7 ANSWER 26 OF 26 USPATFULL on STN

Full Text

ACCESSION NUMBER: 2001:100360 USPATFULL  
 TITLE: Emulsions  
 INVENTOR(S): Loffler, Matthias, Niedernhausen, Germany, Federal Republic of  
 PATENT ASSIGNEE(S): GmbH, Clariant (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001005737	A1	20010628
	US 6489395	B2	20021203
APPLICATION INFO.:	US 2000-733201	A1	20001208 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1999-19959119	19991208
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	CLARIANT CORPORATION, 4331 CHESAPEAKE DR, ATTN: INDUSTRIAL PROPERTY DEPT, CHARLOTTE, NC, 28216	
NUMBER OF CLAIMS:	5	
EXEMPLARY CLAIM:	1	
LINE COUNT:	395	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . invention in amounts of from 0.1 to 5% by weight, preferably 0.3 to 3% by weight, based on the finished **emulsion**. The emulsions may either be water-in-oil emulsions or oil-in-water emulsions.

DETD . . . cream

A	POLYESTER 1	(Clariant)	1.00%
	® Cetiol V		7.00%
	Jojoba oil		5.00%
	Isopropyl palmitate		6.00%
B	® <b>Aristoflex AVC</b>	(Clariant)	0.70%
C	Glycerol		3.00%
	Water		76.90%
	Preservative		q.s.
D	Perfume		0.40%

DETD [0061] III The **emulsion** was homogenized.

DETD . . . Cream

A	POLYESTER 2	(Clariant)	1.00%
	® Cetiol V		7.00%
	Jojoba oil		5.00%
	Isopropyl palmitate		6.00%
B	® <b>Aristoflex AVC</b>	(Clariant)	0.70%
C	Glycerol		3.00%

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	Water		76.90%
	Preservative		q.s.
D	Perfume		0.40%
DETD	.	.	.
A	POLYESTER 1	(Clariant)	1.50%
	Mineral oil,		8.00%
	low-viscosity		
	Isopropyl palmitate		4.00%
	® Eutanol G		4.00%
B	® Aristoflex AVC	(Clariant)	0.70%
C	Water		81.40%
	Preservative		q.s.
D	Perfume		0.40%
DETD	.	.	.
A	POLYESTER 2	(Clariant)	1.00%
	Mineral oil,		8.00%
	low-viscosity		
	Isopropyl palmitate		4.00%
	® Eutanol G		4.00%
B	® Aristoflex AVC	(Clariant)	0.70%
C	Water		81.90%
	Preservative		q.s.
D	Perfume		0.40%
DETD	.	.	.
	(Clariant)		1.00%
	Mineral oil,		10.00%
	high-viscosity		
	Isopropyl palmitate		5.00%
B	® Neo-Heliopan E 1000		8.50%
	® Neo-Heliopan RB		1.50%
C	Aristoflex AVC	(Clariant)	0.60%
D	Glycerol		3.00%
	Water		70.10%
	Preservative		q.s.
E	Perfume		0.30%
DETD	[0072]	III The emulsion was homogenized	
DETD	.	.	.
	(Clariant)		1.00%
	Mineral oil,		10.00%
	high-viscosity		
	Isopropyl palmitate		5.00%
B	® Neo-Heliopan E 1000		8.50%
	® Neo-Heliopan BB		1.50%
C	Aristoflex AVC	(Clariant)	0.60%
D	Glycerol		3.00%
	Water		70.10%
	Preservative		q.s.
E	Perfume		0.30%
DETD	.	.	.
	2.00%		
	Mineral oil,		10.00%
	high-viscosity		
	Isopropyl palmitate		5.00%
B	® Neo-Heliopan E 1000		8.50%
	® Neo-Heliopan BB		1.50%
C	Aristoflex AVC	(Clariant)	0.60%
D	Glycerol		3.00%
	Water		69.10%
	Preservative		q.s.
E	Perfume		0.30%
DETD	[0077]	Chemical names of the commercial products used:	

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Aristoflex AVC: Acrylamidopropylenesulfonic  
acid/vinylformamide  
copolymer  
Cetiol: Decyl oleate  
Eutanol G: Hexyldecanol  
Neo-Heliopan E 1000: Isoamyl p-methoxycinnamate  
Neo-Heliopan BB: Benzophenone-3

CLM What is claimed is:  
1. An **emulsion** comprising oligoesters.  
  
2. The **emulsion** as claimed in claim 1, which comprises oligoesters obtained by polycondensation of one or more dicarboxylic acids or esters thereof. . . .  
3. The **emulsion** as claimed in claim 1, which comprises oligoesters obtained by polycondensation of one or more dicarboxylic acids or esters thereof. . . .  
4. The **emulsion** as claimed in claim 1, which comprises oligoesters obtained by polycondensation of a) 40 to 52 mol %, preferably 45. . . .  
5. The **emulsion** as claimed in claim 1, which comprises 0.1 to 5% by weight of oligoesters.

=> s 335383-60-3/rn  
'RN' IS NOT A VALID FIELD CODE  
'RN' IS NOT A VALID FIELD CODE  
'RN' IS NOT A VALID FIELD CODE  
L8 34 335383-60-3/RN

=> s l8 not l6  
L9 12 L8 NOT L6

=> s l9 and emulsion  
L10 8 L9 AND EMULSION

=> d l0 ibib kwic 1-8  
'L0' IS NOT A VALID FORMAT  
In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.  
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):l10  
'L65' IS NOT A VALID FORMAT  
In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.  
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):d l10 ibib kwic 1-8  
'D' IS NOT A VALID FORMAT  
'L65' IS NOT A VALID FORMAT  
'1-8' IS NOT A VALID FORMAT  
In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.  
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):ibib

L10 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

Full Text

ACCESSION NUMBER: 2004:268295 CAPLUS



## STN Columbus

## STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002004532	A1	20020110
	US 6660252	B2	20031209
APPLICATION INFO.:	US 2001-795423	A1	20010228 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-580743, filed on 26 May 2000, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Estelle J. Tsevdos, Ph.D., J.D., KENYON KENYON, One Broadway, New York, NY, 10004		
NUMBER OF CLAIMS:	20		
EXEMPLARY CLAIM:	1		
LINE COUNT:	369		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			

=&gt; d 110 ibib kwic 1-8

L10 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

Full Text

ACCESSION NUMBER: 2004:268295 CAPLUS  
DOCUMENT NUMBER: 140:292229  
TITLE: Cosmetic skin preparations containing creatine, creatinine and organic thickeners  
PATENT ASSIGNEE(S): Beiersdorf A.-G., Germany  
SOURCE: Ger. Gebrauchsmusterschrift, 28 pp.  
CODEN: GGXXFR  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 20318414	U1	20040401	DE 2003-20318414	20031126
PRIORITY APPLN. INFO.: DE 2003-20318414 20031126				
AB The invention concerns cosmetic skin care emulsions that contain creatine, creatinine and hydrocolloids. Hydrocolloids are selected from the group of acrylic polymers, copolymers and cross polymers, gums and their derivs., cellulose and its derivs. Thus an O/W emulsion was composed of (wt./wt.): glyceryl stearate citrate 2.0; myristyl myristate 1.0; stearyl alc. 2.0; cetyl alc. 1.0; hydrogenated coco fatty acids 2.0; butylene glycol dicaprylate/dicaprate 1.0; ethylhexyl coco fatty acid ester 3.0; vaseline 1.0; dicaprylyl ether 3.0; titanium dioxide 1.0; ethylhexyl methoxy cinnamate 2.0; Ubiquinone Q10 0.03; creatinine 0.1; creatine 1.0; phenoxyethanol 0.8; paraben 0.4; cyclodextrin 0.4; polyacrylic acid 0.1; ammonium acryloyldimethyl taurate-vinyl pyrrolidone copolymer 0.4; glycerin 15; dyes 0.05; fillers and additives 0.1; perfume q.s.; water to 100.				
ST cosmetic emulsion skin creatine creatinine hydrocolloid org thickener				
IT 57-00-1, Creatine 60-27-5, Creatinine 9000-01-5, Gum arabic 9000-65-1, Tragant gum 9000-69-5, Pectin 9002-18-0, Agar 9002-89-5, Polyvinylalcohol 9003-01-4, Polyacrylic acid 9003-05-8, Polyacrylamide 9003-39-8, Polyvinylpyrrolidone 9004-34-6, Cellulose, biological studies 9004-62-0, Hydroxyethyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 9005-25-8, Starch, biological studies 9005-32-7, Alginic acid 9005-37-2, Propylene glycol alginate 11078-30-1, Galactomannan 11138-66-2, Xanthan gum 25087-26-7, Methacrylic acid homopolymer 138757-67-2, Carbopol 980 138757-68-3,				

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Carbopol 981 146701-61-3, Carbopol 1382 176304-01-1, Carbopol 2984  
176304-02-2, Carbopol 5984 195739-91-4, Carbopol Ultrez 10  
335383-60-3

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(cosmetic skin preps. contg. creatine, creatinine and org. thickeners)

L10 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

## Full Text

ACCESSION NUMBER: 2003:988445 CAPLUS  
DOCUMENT NUMBER: 140:31176  
TITLE: Cosmetic oil-in-water emulsions containing a  
combination of cyclodextrins, retinoids, bioquinones  
and polymers  
INVENTOR(S): Filbry, Alexander; Raschke, Thomas; Rapp, Claudius;  
Schwanke, Frank  
PATENT ASSIGNEE(S): Beiersdorf AG, Germany  
SOURCE: Ger. Offen., 28 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10224298	A1	<u>20031218</u>	DE 2002-10224298	20020531
PRIORITY APPLN. INFO.:			DE 2002-10224298	20020531
REFERENCE COUNT:	4	THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		
ST	cosmetic <b>emulsion</b> cream cyclodextrin retinoid ubiquinone polymer			
IT	68-26-8, Retinol 68-26-8D, Retinol, complexes with cyclodextrins 79-81-2, Retinyl palmitate 303-98-0, Coenzyme Q10 7585-39-9, $\beta$ -Cyclodextrin 9003-01-4, Polyacrylic acid 9087-61-0, Aluminum starch octenyl succinate 12619-70-4, Cyclodextrin 17465-86-0, $\gamma$ -Cyclodextrin 17465-86-0D, $\gamma$ -Cyclodextrin, complexes with retinoids and bioquinones 121601-24-9 335383-60-3			
RL:	COS (Cosmetic use); BIOL (Biological study); USES (Uses) (cosmetic oil-in-water emulsions contg. a combination of cyclodextrins, retinoids, bioquinones and polymers)			

L10 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

## Full Text

ACCESSION NUMBER: 2003:221480 CAPLUS  
DOCUMENT NUMBER: 138:260098  
TITLE: Water-in-silicone emulsions for cosmetic use  
INVENTOR(S): Bleckmann, Andreas; Fueller, Silke; Kroepke, Rainer;  
Nielsen, Jens  
PATENT ASSIGNEE(S): Beiersdorf AG, Germany  
SOURCE: PCT Int. Appl., 20 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003022235	A2	<u>20030320</u>	WO 2002-EP10006	<u>20020906</u>
WO 2003022235	A3	<u>20030731</u>		
W: JP, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR				

## STN Columbus

DE 10144235 A1 20030327 DE 2001-10144235 20010908  
PRIORITY APPLN. INFO.: DE 2001-10144235 A 20010908  
AB The invention relates to cosmetic or dermatol. emulsions of the water-in-silicone type comprising: (i) up to 85 wt. % of a water phase; (ii) 10 to 80 wt. % of silicone oil; (iii) 0.1 to 25 wt. % of one or more W/S emulsifiers selected from the group consisting of cetyl dimethicone copolyol, lauryl dimethicone copolyol, PEG/PPG-18/18 dimethicone, trimethylsilylamodimethicone; (iv) 0.01 to 5 wt. % of one or more ammonium acryloyldimethyltaurate/vinylpyrrolidone copolymers, each with regard to the total wt. of the prepns. Thus a W/S **emulsion** contained (wt./wt.%): cetyl dimethicone copolyol 1.0; cyclomethicone mixt. with PEG/PPG-18/18 dimethicone (90:10 wt./wt.%) 10.0; cyclomethicone 32.5; dimethicone 5.0; hydrogenated polyisobutene 0.5; octyldodecanol 0.5; panthenol 0.5; sodium chloride 2.0; glycerin 3.0; citric acid 0.2; perfume q.s.; methylparaben 0.4; ammonium acryloyldimethyltaurate/vinylpyrrolidone copolymer 1.0; propylparaben 0.3; cetyl dimethicone 0.5; water to 100.  
ST cosmetic water silicone **emulsion** emulsifier cryloyldimethyltaurate vinylpyrrolidone copolymer  
IT 9006-65-9, Dimethicone 9006-65-9D, Dimethicone, ethoxylated, propoxylated 139465-30-8, DC 3225C 145686-34-6, Cetyldimethicone copolyol 149531-86-2, Lauryl dimethicone copolyol 335383-60-3, Ammonium 2-acrylamido-2-methyl-1-propanesulfonate-N-vinylformamide-1-vinyl-2-pyrrolidinone copolymer  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(water-in-silicone emulsions for cosmetic use)

L10 ANSWER 4 OF 8 USPATFULL on STN

Full Text

ACCESSION NUMBER: 2004:50371 USPATFULL  
TITLE: Water-in-oil emulsions containing one or more ammonium acryloyldimethyltaurate/vinylpyrrolidone copolymers  
INVENTOR(S): Nielsen, Jens, Henstedt-Ulzburg, GERMANY, FEDERAL REPUBLIC OF  
Kropke, Rainer, Schenefeld, GERMANY, FEDERAL REPUBLIC OF  
Bleckmann, Andreas, Hamburg, GERMANY, FEDERAL REPUBLIC OF  
PATENT ASSIGNEE(S): Beiersdorf AG (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004037797	A1	20040226
APPLICATION INFO.:	US 2003- <del>602392</del>	A1	20030623 (10) <i>my app</i>
RELATED APPLN. INFO.:	Continuation of Ser. No. WO 2001-EP15095, filed on 20 Dec 2001, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2000-10065045	20001223
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	ALSTON BIRD LLP, BANK OF AMERICA PLAZA, 101 SOUTH TRYON STREET, SUITE 4000, CHARLOTTE, NC, 28280-4000	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1153	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . usually referred to as phases, which are immiscible or miscible with one another only to a limited extent. In an **emulsion**, one of the two liquids is dispersed in the form of very fine droplets in the other liquid.

SUMM . . . the two liquids are water and oil and oil droplets are very

## STN Columbus

finely dispersed in water, this is an oil-in-water **emulsion** (O/W **emulsion**, e.g. milk). The basic character of an O/W **emulsion** is determined by the water. In the case of a water-in-oil **emulsion** (W/O **emulsion**, e.g. butter), the principle is reversed, the basic character being determined here by the oil.

SUMM . . . of a liquid composition which can be applied by means of roll-on devices, but also in the form of an **emulsion** which can be applied from normal bottles and containers.

CLM What is claimed is:

1. A cosmetic or dermatological water-in-oil **emulsion**, comprising (i) up to 95% by weight of a water phase, (ii) up to 60% by weight of a lipid. . . (iv) up to 5% by weight of one or more ammonium acryloyldimethyltaurate/vinylpyrrolidone copolymers, based on the total weight of the **emulsion**.

2. The **emulsion** as claimed in claim 1, wherein the content of the one or more ammonium acryloyldimethyltaurate/vinylpyrrolidone copolymers is from 0.01 to 5% by weight, based on the total weight of the **emulsion**.

3. The **emulsion** as claimed in claim 1, wherein its lipid content is from 0.5 to 60% by weight, based on the total weight of the **emulsion**.

4. The **emulsion** as claimed in claim 1, wherein its lipid content is from 10 to 30% by weight, based on the total weight of the **emulsion**.

5. The **emulsion** as claimed in claim 1, wherein the water phase includes water and one or more compounds selected from the group. . .

6. The **emulsion** as claimed in claim 1, wherein the water phase includes at least one hydrocolloid or thickener.

7. The **emulsion** as claimed in claim 1, wherein the lipid phase includes one or more compounds selected from the group consisting of. . .

8. The **emulsion** as claimed in claim 1, wherein the emulsifier includes one or more compounds selected from the group consisting of glyceryl. . .

9. The **emulsion** as claimed in claim 1, wherein the emulsifier includes both a water-in-oil emulsifier and an oil-in-water emulsifier.

10. A cosmetic or dermatological water-in-oil **emulsion**, comprising (i) up to 95% by weight of a water phase, (ii) from 20 to 60% by weight of a. . .

11. The **emulsion** as claimed in claim 10, wherein one or more antioxidants is present in an amount from 1 to 10% by weight, based on the total weight of the **emulsion**.

12. The **emulsion** as claimed in claim 10, wherein one or more antioxidants is selected from the group consisting of vitamin E, vitamin. . .

13. The **emulsion** as claimed in claim 10, wherein the total amount of dyes and color-imparting pigments is present in an amount from 0.1 to 30% by weight, based on the total weight of the **emulsion**.

14. The **emulsion** as claimed in claim 10, wherein the total amount of dyes and pigments is present in an amount from 0.5 to 15% by weight, based on the total weight of the **emulsion**.

15. The **emulsion** as claimed in claim 10, wherein the total amount of dyes and pigments is present in an amount from 1.0 to 10% by weight, based on the total weight of the **emulsion**.

16. An eye shadow, including the **emulsion** as claimed in claim 10.

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17. A method of treating skin or hair, comprising applying to the skin or hair a cosmetic or dermatological water-in-oil **emulsion**, comprising (i) up to 95% by weight of a water phase, (ii) up to 60% by weight of a lipid. . . (iv) up to 5% by weight of one or more ammonium acryloyldimethyltaurate/vinylpyrrolidone copolymers, based on the total weight of the **emulsion**.

18. The method as claimed in claim 17, wherein the cosmetic or dermatological water-in-oil **emulsion** is applied by spraying the **emulsion** from an aerosol container.

19. The method as claimed in claim 17, wherein the cosmetic or dermatological water-in-oil **emulsion** is applied by means of a roll-on device.

20. The method as claimed in claim 17, wherein the cosmetic or dermatological water-in-oil **emulsion** is applied from a squeezable bottle or bottle with a pump device.

IT 56-81-5, Glycerin, biological studies 57-11-4D, Stearic acid, dipolyhydroxy compd. with PEG 25322-68-3D, PEG, reaction product with stearic acid 26896-18-4D, Isononanoic acid, esters with C16-18-alcs. 335383-60-3, Aristoflex AVC  
(water-in-oil emulsions contg. ammonium acryloyl dimethyltaurate-vinyl pyrrolidone copolymers)

L10 ANSWER 5 OF 8 USPATFULL on STN

## Full Text

ACCESSION NUMBER: 2003:172776 USPATFULL  
TITLE: Thickener system for cosmetic compositions  
INVENTOR(S): Zhang, Joanna Hong, Milford, CT, UNITED STATES  
Suarez, Alan Joseph, Cheshire, CT, UNITED STATES  
PATENT ASSIGNEE(S): Unilever Home Personal Care USA, Division of Conopco Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003118620	A1	<u>20030626</u>
APPLICATION INFO.:	US 2002-56968	A1	<u>20020124</u> (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001- <u>818660P</u>	<u>20010912</u> (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	UNILEVER, PATENT DEPARTMENT, 45 RIVER ROAD, EDGEWATER, NJ, 07020	
NUMBER OF CLAIMS:	9	
EXEMPLARY CLAIM:	1	
LINE COUNT:	497	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM [0007] U.S. Pat. No. 5,952,395 (Lorant) and U.S. Pat. No. 5,891,452 (Sebillote-Arnaud et al.) describe cosmetic compositions gelled into an **emulsion** with a cross-linked poly(2-acrylamido-2-methylpropanesulfonic acid).

SUMM [0012] It is still another object of the present invention to provide thickening systems for water and oil **emulsion** cosmetic compositions that also function as stabilizers preventing phase separation.

SUMM . . . selected having regard for the use of the composition and possible incompatibilities between the preservatives and other ingredients in the **emulsion**. Preservatives are preferably employed in

# STN Columbus

amounts ranging from about 0.01% to about 2% by weight of the composition.

IT 9000-01-5, Arabic gum 9000-07-1, Carrageenan gum 9000-30-0, Guar gum 9000-36-6, Karaya gum 9000-69-5, Pectin 9002-18-0, Agar 9005-32-7, Alginic acid 11138-66-2, Xanthan gum 39464-87-4, Sclerotium gum 57123-13-4 335383-60-3, Aristoflex AVC  
(thickener system for cosmetic compns.)

L10 ANSWER 6 OF 8 USPATFULL on STN

## Full Text

ACCESSION NUMBER: 2003:172775 USPATFULL  
TITLE: Thickened cosmetic compositions  
INVENTOR(S): Suares, Alan Joseph, Cheshire, CT, UNITED STATES  
Zhang, Joanna Hong, Milford, CT, UNITED STATES  
PATENT ASSIGNEE(S): Unilever Home Personal Care USA, Division of Conopco, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003118619	A1	20030626
APPLICATION INFO.:	US 2002-56923	A1	20020124 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001- <u>318687P</u>	<u>20010912</u> (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	UNILEVER, PATENT DEPARTMENT, 45 RIVER ROAD, EDGEWATER, NJ, 07020	
NUMBER OF CLAIMS:	8	
EXEMPLARY CLAIM:	1	
LINE COUNT:	480	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM [0007] U.S. Pat. No. 5,952,395 (Lorant) and U.S. Pat. No. 5,891,452 (Sebillote-Arnaud et al.) describe cosmetic compositions gelled into an **emulsion** with a cross-linked poly(2-acrylamido-2-methylpropanesulfonic acid).

SUMM [0012] It is still another object of the present invention to provide thickening systems for water and oil **emulsion** cosmetic compositions that also function as stabilizers preventing phase separation.

SUMM . . . selected having regard for the use of the composition and possible incompatibilities between the preservatives and other ingredients in the **emulsion**. Preservatives are preferably employed in amounts ranging from about 0.01% to about 2% by weight of the composition.

IT 50-21-5, Lactic acid, biological studies 79-14-1, Glycolic acid, biological studies 617-73-2, 2-Hydroxyoctanoic acid 35249-89-9, Ammonium glycolate 335383-60-3, Aristoflex AVC 501084-04-4 501084-84-0  
(thickened cosmetic compns. comprising hydroxycarboxylic acid and taurate copolymer)

L10 ANSWER 7 OF 8 USPATFULL on STN

## Full Text

ACCESSION NUMBER: 2002:332458 USPATFULL  
TITLE: Cosmetic composition with organic sunscreen and porous powder particles  
INVENTOR(S): Faryniarz, Joseph Raymond, Middlebury, CT, United States  
Suarez, Alan Joseph, Cheshire, CT, United States  
Zhang, Joanna Hong, Milford, CT, United States  
Cheney, Michael Charles, Fairfield, CT, United States

## STN Columbus

PATENT ASSIGNEE(S): Unilever Home Personal Care USA, division of Conopco, Inc., Greenwich, CT, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US <u>6495123</u>	B1	20021217
APPLICATION INFO.:	US 2002-144997		20020514 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-318691P	<u>20010912</u> (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Dodson, Shelley A.	
LEGAL REPRESENTATIVE:	Honig, Milton L.	
NUMBER OF CLAIMS:	7	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	0 Drawing Figure(s); 0 Drawing Page(s)	
LINE COUNT:	485	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . systems. Organic sunscreens often have a sticky or tacky feel. These attributes must be counteracted when formulated into an aqueous **emulsion** composition. Formulating an aesthetically pleasant system incorporating these actives remains a challenge to chemists.

SUMM Another advantage of the present invention is to provide a sunscreen agent formulated cosmetic composition that is an aqueous **emulsion** of low pH having good skinfeel properties.

SUMM . . . selected having regard for the use of the composition and possible incompatibilities between the preservatives and other ingredients in the **emulsion**. Preservatives are preferably employed in amounts ranging from about 0.01% to about 2% by weight of the composition.

IT 74-85-1D, Ethylene, polymers 75-35-4D, Vinylidene chloride, polymers 79-10-7D, Acrylic acid, polymers 79-41-4D, Methacrylic acid, polymers 88-12-0D, polymers 96-33-3D, Methyl acrylate, polymers 100-42-5D, Styrene, polymers 106-99-0D, Butadiene, polymers 107-13-1D, Acrylonitrile, polymers 110-16-7D, Maleic acid, polymers 115-07-1D, Propylene, polymers 140-88-5D, Ethyl acrylate, polymers 5466-77-3, Octyl methoxycinnamate 9011-14-7, Polymethyl methacrylate 25777-71-3, Ganzpearl GMP 0820 335383-60-3, Aristoflex AVC (cosmetic compn. with org. sunscreen and porous polymer powder particles)

L10 ANSWER 8 OF 8 USPATFULL on STN

Full Text

ACCESSION NUMBER: 2002:8532 USPATFULL  
TITLE: Low emulsifier multiple emulsions  
INVENTOR(S): Matathia, Michelle, Plainview, NY, UNITED STATES  
Tadlock, Charles Craig, Islip Terrace, NY, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002004532	A1	20020110
	US 6660252 ✓	B2	20031209
APPLICATION INFO.:	US 2001-795423	A1	20010228 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-580743, filed on 26 May 2000, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	Estelle J. Tsevdos, Ph.D., J.D., KENYON KENYON, One Broadway, New York, NY, 10004		

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NUMBER OF CLAIMS: 20  
EXEMPLARY CLAIM: 1  
LINE COUNT: 369

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to multiple emulsions comprising a primary **emulsion** in an external phase, and comprising a principle water phase and a principle oil phase, the multiple **emulsion** containing no more than about 1% of an emulsifier having an HLB of about 16 to about 20.

SUMM [0002] One of the most common vehicles for cosmetic and pharmaceutical products is the **emulsion**. Because they are formed by the dispersion of an oil in water, or water in an oil, emulsions provide great. . .

SUMM . . . keeping the components of the dispersion together. Typically, maintenance of a stable dispersion requires the addition of substantial amounts of **emulsion** stabilizers and/or emulsifiers. The necessity of addition of these materials not only adds cost to the final product, but also has an effect on the quality of the final product, by affecting the way the **emulsion** breaks, as well as how it feels on the skin. Use of large quantities of emulsifiers is particularly undesirable, as. . .

SUMM [0004] The problem in further magnified when the formulation desired is a multiple **emulsion**, for example, a water-in-oil-in water, or oil-in-water-in-oil. Such emulsions, when feasible, provide a multipurpose product, at least in principle permitting. . . phase introduces further problems with stability, and therefore, they frequently require the use of very large quantities of emulsifiers and/or **emulsion** stabilizers. Further, once a particular system is established, the addition of other materials to the stable **emulsion** will tend to destabilize it. Therefore, the full potential of the multiple **emulsion** has not been fully realized. The present invention, however, provides an advance in the preparation of low-emulsifier multiple emulsions.

SUMM [0005] The present invention relates to a stable oil and water multiple **emulsion**, the **emulsion** comprising less than about 1% of traditional emulsifiers, i.e., emulsifiers having an HLB of about 16-20. The multiple **emulsion** is formed from the combination of a standard two phase **emulsion** (water-in-oil or oil-in-water) and a single phase (water or oil). Preferably, the principle oil phase is thickened by the addition of an oil miscible polymer having polar moieties. In a preferred embodiment, particularly in the water-in-oil-in water type of **emulsion**, the viscosity of the two components, i.e., the primary **emulsion** and the external phase, are adjusted so as to be substantially the same. In such an embodiment, the viscosity of. . .

SUMM . . . invention are prepared in much the same way as other multiple emulsions are prepared. Initially, a water-in-oil or an oil-in-water **emulsion** is prepared according to standard procedure. For a standard **emulsion**, the water soluble ingredients are combined together in an aqueous vehicle, the oil soluble ingredients are combined in the oil. .

SUMM . . . phase be a silicone oil, particularly dimethicone, cyclomethicone, or a combination of both. Most preferably, the silicone portion of the **emulsion** should be about 15-50% of the total water-in-silicone **emulsion**. Incorporated into the oil phase is an oil-miscible polymer having polar moieties. The polymer provides some level of thickening, and. . . more preferably no greater than about 2%, most preferably no greater than about 1%, by weight of the total multiple **emulsion**

SUMM [0009] To prepare a water-in-silicone (or oil)-in water **emulsion**, the simple **emulsion** is added to a water phase which will serve as the external phase of the multiple **emulsion**. The proportion of **emulsion** to the water phase can be up to 50:50, but preferably is in the range of about 10-40:90-60 **emulsion**:water, and most preferably is in the range of about 30-40:70-60. In order to enhance the stability, the external water phase. . . N.C. under the name trade name Aristoflex AVC®.



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The amount of thickener is not crucial, and in this type of **emulsion** will be used in an amount sufficient to give the desired viscosity.

SUMM . . . of about 16.7. Unlike more typical multiple emulsions, there is very little of this standard emulsifier needed to hold the **emulsion** together. Overall, there will ordinarily be no more than 2% total emulsifier of any kind in the multiple **emulsion**, and preferably no more than 1%, more preferably 0.5% or less (by weight of the multiple **emulsion**) of a standard ethoxylated emulsifier. The high HLB emulsifier is added to the principle water phase after gelling and just prior to combination with the water-in-oil primary **emulsion**. The two entities are then combined by static mixing, and mixed to homogeneity.

SUMM [0011] The foregoing system has been described in terms of a water-in-oil-in-water **emulsion**. However, the system can also be used to prepare an oil-in-water-in-oil **emulsion**. In this scenario, a primary oil-in-water **emulsion** is prepared, preferably by high shear mixing to create a water-thin **emulsion**, such as described, for example, in Example 2B below, or in co-pending U.S. patent application Ser. No. 09/580,743, the contents of which are incorporated herein by reference. This primary **emulsion** is optionally thickened as described above for the water phase of the water-in-oil-in-water **emulsion**. The primary **emulsion** is then added to the principle oil phase thickened with an oil-miscible absorbent polymer, preferably a dimethicone copolyol crosspolymer, as described for the water-in-oil-in-water **emulsion**, and mixed by static mixing. The oil-in-water-in-oil is somewhat more stable than the water-in-oil-in-water; therefore, this multiple **emulsion** can be prepared with substantially no added traditional emulsifier. In addition, the primary **emulsion** can be added to the external phase in a broader range, generally about 10-60:90-40 **emulsion**:external oil phase. At the higher levels of the range, however, the amount of polymer in the external phase should be . . .

SUMM [0012] Similarly, it is possible to create a quadruple **emulsion** using the same general methodology. To prepare this type of multiple **emulsion**, a water-thin oil-in-water **emulsion** is prepared as described above, and thickened as if it were the water phase of the triple **emulsion** first described. A water-in-oil **emulsion**, thickened with the oil-miscible polymer, is added to the thickened oil-in-water **emulsion**, and mixed to homogeneity with static mixing.

SUMM [0013] The emulsions prepared as described above are highly stable. However, additional stability, particularly with the water-in-oil-in-water **emulsion**, can be obtained by matching the viscosities of the primary **emulsion** and the external phase. As already noted above, the overall viscosity of the product is a matter of choice, depending. . . on the intended final use of the product. However, it is preferred, within that framework, that the viscosities of the **emulsion** and external phase be matched to within about 10%, viscosity being measured in centipoise by a Brookfield viscometer.

SUMM . . . and the desired elegant feel of the final product. The system also permits for a greater concentration of the primary **emulsion** (10-50%) in the multiple **emulsion**, thereby permitting a broader variety of textures, and a broader appeal to a wide range of consumers. As with other. . . used as a novel delivery system for pigment, in which the pigment is incorporated into the internal phase of the **emulsion**, and the color developed after rubbing on the skin. The emulsions can essentially be used for any type of application in which a standard **emulsion** is routinely used, for example, skin care products, pharmaceutical or veterinary drug delivery, sunscreens/self-tanners, rinse-off hair conditions, and liquid makeups.

DETD [0016] A. Preparation of primary **emulsion** for a triple **emulsion** foundation

Material

Weight %

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Phase 1  
 Cyclomethicone/dimethicone 5.00  
 Phenyl trimethicone 5.00  
 Dimethicone/dimethicone copolyol 7.00  
 Crosspolymer (75:25)  
 Cyclomethicone. . .  
 DETD [0018] B. Preparation of triple **emulsion**  
 DETD . . . 10.00  
 Dimethicone copolyol 0.50  
 Glycereth-26 2.00  
 1,3 butylene glycol 5.00  
 Tween 20 0.30  
 (ii) thickener 1.50  
 AMPS/VIFA copolymer\*\*  
 (iii) primary **emulsion** 30.00  
 composition of Example 1A

\*of total multiple **emulsion**

\*\*ammonium poly(acryldimethyltauramide-co-vinylformamide)-Aristoflex AVC ®,  
 Clariant Corporation

DETD . . . static mixing, the thickener is added to the water phase and  
 mixed until a clear gel is formed. The primary **emulsion** is added to  
 the previously combined materials under continuous static mixing until  
 mixed to completion.

DETD [0021] Preparation of a quadruple **emulsion** of the invention

DETD [0022] A. A water-in-oil primary **emulsion** is prepared as follows:

Material	Weight %
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Phase I	
Cyclomethicone/dimethicone	5.00
Phenyltrimethicone	5.00
Dimethicone/copolyol crosspolymer	7.00
Cyclomethicone. . .	
DETD [0024] B. Water-thin, low emulsifier <b>emulsion</b> serving as the external	
"water" phase is prepared as follows:	

Phase I	
deionized water	32.50
Arlatone Versaflex High	1.00
Performance <b>Emulsion</b> Stabilizer*	
Phase II	
Deionized water	32.05
Methyl paraben	0.20
Butylene glycol	3.00
Phenoxyethanol	0.40
Phase III	
Behenyl alcohol	0.75
Pentaerythrityl. . .	
DETD . . . 5 minutes. The combined components are then passed through a	
microfluidizer at 16,000 psi three times to achieve a water-thin	
<b>emulsion</b> .	
DETD [0026] C. Quadruple <b>emulsion</b>	

Material	Weight %
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Polysorbate 20	0.20
Carbopol	1.00
O/W emulsion from B.	78.80
W/O emulsion from A.	20.00

DETD [0027] The O/W emulsion is combined with the Carbopol using static mixing. Polysorbate 20 is then added. The W/O emulsion is slowly added to the O/W phase utilizing static mixing. When the addition is complete, the mixing is continued for about 5 minutes until the multiple emulsion is uniform.

CLM What is claimed is:

1. A stable multiple emulsion comprising a primary emulsion in an external phase, and comprising a principle water phase and a principle oil phase, the multiple emulsion containing no more than about 1% of an emulsifier having an HLB of about 16 to about 20.
2. The emulsion of claim 1 in which the principle oil phase is thickened with an oil-miscible polymer having polar moieties.
3. The emulsion of claim 2 in which the principle oil phase comprises primarily silicone oil.
4. The emulsion of claim 3 in which the polymer is a dimethicone copolyol crosspolymer.
5. The emulsion of claim 2 which is a water-in-oil-in water emulsion.
6. The emulsion of claim 5 in which the principle water phase is thickened by a water-miscible thickener.
7. The emulsion of claim 5 in which the water miscible thickener is selected from the group consisting of gums, carbomer, cellulose, chitosan, . . .
8. The emulsion of claim 5 in which the thickener is AMPS/VIFA copolymer.
9. The emulsion of claim 1 in which the viscosity of the primary emulsion and the viscosity of the external phase are matched to within about 10%.
10. The emulsion of claim 9 in which the emulsion is a water-in-oil-in water emulsion.
11. The emulsion of claim 1 which is an oil-in-water-in-oil emulsion containing substantially no emulsifier having an HLB of 16-20.
12. The emulsion of claim 1 which is a quadruple emulsion.
13. A stable multiple emulsion comprising a primary emulsion in an external phase, and comprising a principle water phase and a principle oil phase, the principle water phase being . . . thickener, and the principle oil phase being thickened with an oil-miscible polymer having polar moieties, the viscosity of the primary emulsion and the viscosity of the external phase being matched to within about 10%, and the multiple emulsion containing no more than about 1% of an emulsifier having an HLB of about 16 to about 20.
14. The emulsion of claim 13 which is a triple emulsion.
15. The emulsion of claim 14 which is an oil-in-water-in-oil emulsion.
16. The emulsion of claim 14 which is a water-in-oil-in-water emulsion.

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17. The **emulsion** of claim 13 which is a quadruple **emulsion**.

18. The **emulsion** of claim 13 in which the principle oil phase comprises silicone and the thickener is dimethicone/dimethicone copolyol crosspolymer.

19. The **emulsion** of claim 13 in which the water miscible thickener is selected from the group consisting of gums, carbomer, cellulosics, chitosan, . . .

20. The **emulsion** of claim 12 in which the thickener is AMPS/VIFA copolymer.

IT 9004-34-6D, Cellulose, derivs. 9005-25-8D, Starch, derivs. 9006-65-9,  
Dimethicone 9012-76-4, Chitosan 11138-66-2, Xanthan gum  
195868-36-1, Phenyl trimethicone 335383-60-3, Aristoflex AVC  
(low-emulsifier multiple emulsions)

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17. The emulsion of claim 13 which is a quadruple emulsion.

18. The emulsion of claim 13 in which the principle oil phase comprises silicone and the thickener is dimethicone/dimethicone copolyol crosspolymer.

19. The emulsion of claim 13 in which the water miscible thickener is selected from the group consisting of gums, carbomer, cellulose, chitosan, . . .

20. The emulsion of claim 12 in which the thickener is AMPS/VIFA copolymer.

IT 9004-34-6D, Cellulose, derivs. 9005-25-8D, Starch, derivs. 9006-65-9,  
Dimethicone 9012-76-4, Chitosan 11138-66-2, Xanthan gum  
195868-36-1, Phenyl trimethicone 335383-60-3, Aristoflex AVC  
(low-emulsifier multiple emulsions)

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(FILE 'HOME' ENTERED AT 16:02:03 ON 26 MAY 2004)

FILE 'CAPLUS, KOSMET, USPATFULL, SCISEARCH, IPA' ENTERED AT 16:04:05 ON  
26 MAY 2004

L1 3841 S 58374-69-9/RN OR 13162-05-5/RN OR 88-12-0/RN

FILE 'REGISTRY' ENTERED AT 16:05:25 ON 26 MAY 2004

FILE 'CAPLUS, KOSMET, USPATFULL, SCISEARCH, IPA' ENTERED AT 16:05:26 ON  
26 MAY 2004

L2 24 S 58374-69-9/RN

FILE 'REGISTRY' ENTERED AT 16:06:25 ON 26 MAY 2004

FILE 'CAPLUS, KOSMET, USPATFULL, SCISEARCH, IPA' ENTERED AT 16:06:25 ON  
26 MAY 2004

L3 0 S 58374-69-9/RN AND 13162-05-5/RN AND 88-12-0/RN

L4 204 S 13162-05-5/RN

FILE 'REGISTRY' ENTERED AT 16:08:04 ON 26 MAY 2004

FILE 'CAPLUS, KOSMET, USPATFULL, SCISEARCH, IPA' ENTERED AT 16:08:05 ON  
26 MAY 2004

L5 45 S ARISTOFLEX### AVC##

L6 44 DUP REM L5 (1 DUPLICATE REMOVED)

L7 26 S L6 AND EMULSION

L8 34 S 335383-60-3/RN

L9 12 S L8 NOT L6

L10 8 S L9 AND EMULSION

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